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GFI MailSecurity 2011 for Exchange/SMTP

Administration & Configuration Manual

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Document Version: MSEC-UM-EN-1.01.001

Last updated: April 11, 2011

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1 Introduction

1.1 Introduction to GFI MailSecurity

Email is frequently used as a means for distributing harmful content (for example, through email attachments). GFI MailSecurity acts as an email firewall to protect an email system against malicious email attacks. The software uses various methods to block malicious emails, such as multiple virus scanning engines and link scanning technology. Using the GFI MailSecurity web-based interface, you can easily configure and optimize the software for your requirements. Blocked emails can then be reviewed and the appropriate action taken accordingly.

1.2 Using this manual

This user manual is a comprehensive guide that aims to assist systems administrators in configuring and using GFI MailSecurity in the best way possible. It builds up on the instructions provided in the GFI MailSecurity 'Getting Start Guide' and describes the configuration settings that systems administrators must do to achieve the best possible results out of the software.

The GFI MailSecurity Getting Start Guide can be accessed from:

http://www.gfi.com/mailsecurity/manual/

1.2.1 Manual structure

This manual contains the following chapters:

Chapter 1	**Introduction** Introduces this manual.
Chapter 2	**About GFI MailSecurity** Provides basic information about GFI MailSecurity.
Chapter 3	**Monitoring email processing status** Describes how to use the GFI MailSecurity Dashboard to monitor the status of the software, including monitoring email processing activity.
Chapter 4	**General settings** Provides instructions on how to configure basic settings of GFI MailSecurity.
Chapter 5	**Configuring Virus Scanning Engines** Describes how to configure and optimize anti-virus scanning engines.
Chapter 6	**Configuring other mail filters** Describes how to configure the other mail scanning features included with GFI MailSecurity.
Chapter 7	**Quarantine** Provides instructions how to use and customize the GFI MailSecurity Quarantine.

Chapter 8	**Reporting** Describes how to configure the reporting database to generate reports using the GFI MailSecurity ReportPack.
Chapter 9	**Miscellaneous** Provides information how to use and configure other features of the product.
Chapter 10	**Troubleshooting** Contains information on how to deal with any problems encountered while using GFI MailSecurity. Also provides extensive support information.
Chapter 11	**Glossary** Defines technical terms used within GFI MailSecurity.

1.2.2 Terms and conventions used in this manual

The following terms and conventions are used in the documentation of this manual:

NOTE:	Additional information and references essential for correct operation.
	Important notifications and cautions regarding potential issues that are commonly encountered.
►	Step by step navigational instructions to access a specific task.
Bold	Names of items to select such as nodes, menu options or command buttons.
<Italics>	Parameters and values that you must replace with the applicable value, such as custom paths and filenames.

For any technical terms and their definitions as used in this manual, refer to the Glossary chapter.

2 About GFI MailSecurity

2.1 GFI MailSecurity components

GFI MailSecurity scan engine

The GFI MailSecurity scan engine analyzes the content of all inbound and outbound email. If you install GFI MailSecurity on the Microsoft Exchange Server, it will also scan the Microsoft Exchange Information Store and internal emails. When GFI MailSecurity quarantines an email, it informs the appropriate supervisor/administrator via Email or RSS feed, depending on the options configured.

GFI MailSecurity web interface

Through the GFI MailSecurity web interface, you can:

- Monitor email scanning activity
- Manage scanning and filtering engines
- Configure GFI MailSecurity settings
- Review quarantined emails

GFI MailSecurity Switchboard

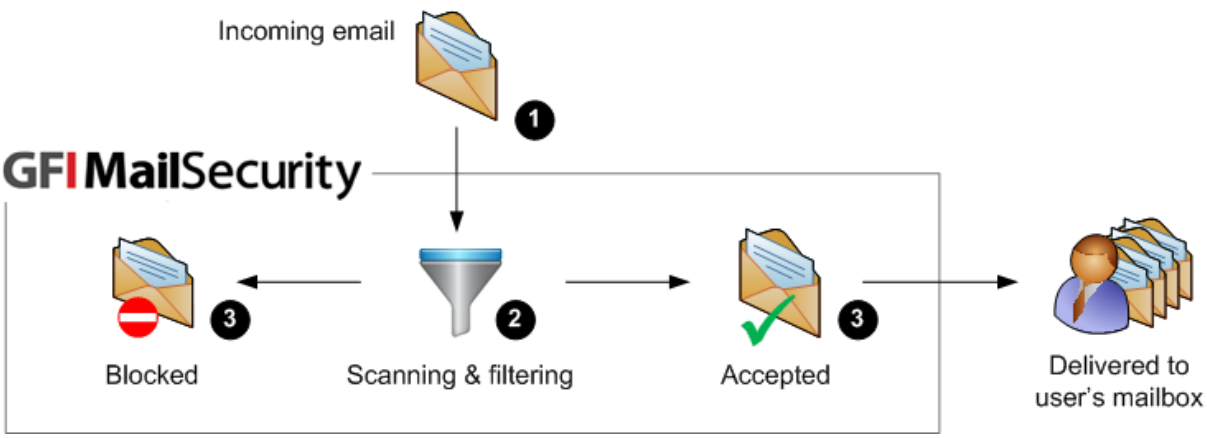
Use the GFI MailSecurity Switchboard to configure:

- The GFI MailSecurity launch mode
- Website and Virtual Directory names for the web interface and quarantine
- Tracing options to create log files for debugging purposes.

2.2 How GFI MailSecurity works

This section provides a high-level overview on how GFI MailSecurity works.

2.2.1 Incoming email



Screenshot 1 -Incoming email

1. Incoming email is relayed to the GFI MailSecurity machine.

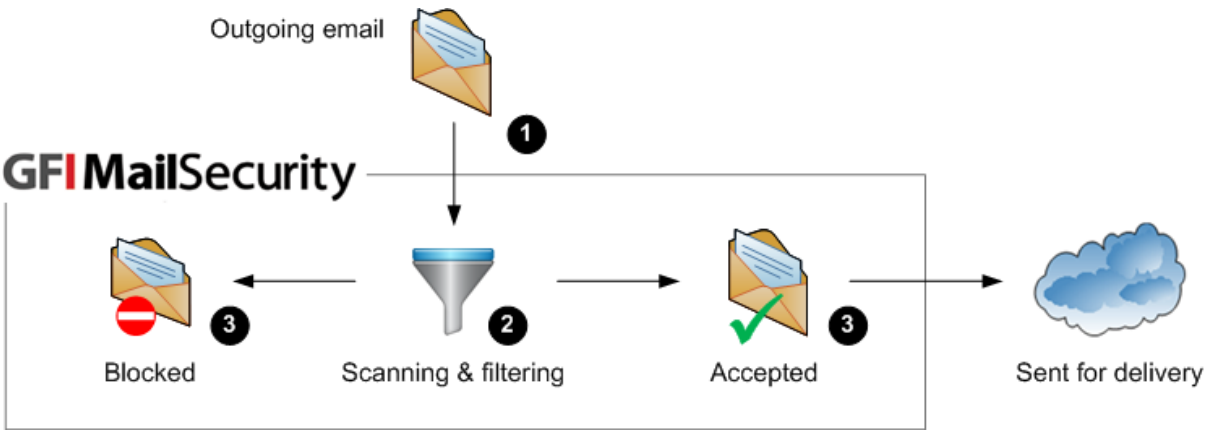
2. Email is scanned by GFI MailSecurity using the email scanning engines and filters configured to scan inbound emails.

EMAIL SCANNING ENGINE	DESCRIPTION
Virus Scanning Engines	Scan emails for viruses and malicious code. Some engines also include other features, such as macro checking, link scanning and Sandbox technology.
Content and attachment filtering	Block emails that match any rules containing pre-configured conditions within the email body or attachments.
Decompression engine	Analyzes compressed attachments for potentially malicious content.
Trojan & executable scanner	Analyzes the function of executable files for malicious code.
Email exploit engine	Checks if attachments contain any exploits.
HTML Sanitizer	Scans and removes html code with email body and attachments.

3. GFI MailSecurity applies the appropriate action depending on the scan results.

SCAN RESULT	ACTION
Accepted	If the email is safe, delivery to the user's mailbox is allowed.
Blocked	When a compromised email is detected, the appropriate action is taken by GFI MailSecurity depending on which action is configured (for example, the email is quarantined).

2.2.2 Outgoing email



Screenshot 2 -Outgoing email

1. Outgoing email is relayed to the GFI MailSecurity machine.

2. Email is scanned by GFI MailSecurity using the email scanning engines and filters configured to scan outbound emails.

EMAIL SCANNING ENGINE	DESCRIPTION

Virus Scanning Engines	Scan emails for viruses and malicious code. Some engines also include other features, such as macro checking, link scanning and Sandbox technology.
Content and attachment filtering	Block emails that match any rules containing pre-configured conditions within the email body or attachments.
Trojan & executable scanner	Analyzes the function of executable files for malicious code.
Email exploit engine	Checks if attachments contain any exploits.
HTML Sanitizer	Scans and removes html code with email body and attachments.

3. GFI MailSecurity applies the appropriate action depending on the scan results.

SCAN RESULT	ACTION
Accepted	If the email is safe, delivery to the user's mailbox is allowed.
Blocked	When a compromised email is detected, the appropriate action is taken by GFI MailSecurity depending on which action is configured (for example, the email is quarantined).

2.2.3 Other features

Apart from scanning incoming and outgoing emails, GFI MailSecurity also includes the features listed below.

FEATURE	DESCRIPTION
Internal emails scanning	Attachment Filtering and Content Filtering can be configured to scan internal emails when GFI MailSecurity is installed on the Microsoft Exchange server.
Information Store Protection	Scans the Microsoft Exchange Information Store using the Virus Scanning Engines.
Directory Harvesting	Deletes emails addressed to nonexistent users from the Quarantine Store.
Quarantine Store	A central repository within GFI MailSecurity where all blocked emails are retained until review.

2.3 Licensing

For information on licensing, refer to:

http://www.gfi.com/products/gfi-mailsecurity/pricing/licensing.

3 Monitoring the GFI MailSecurity status

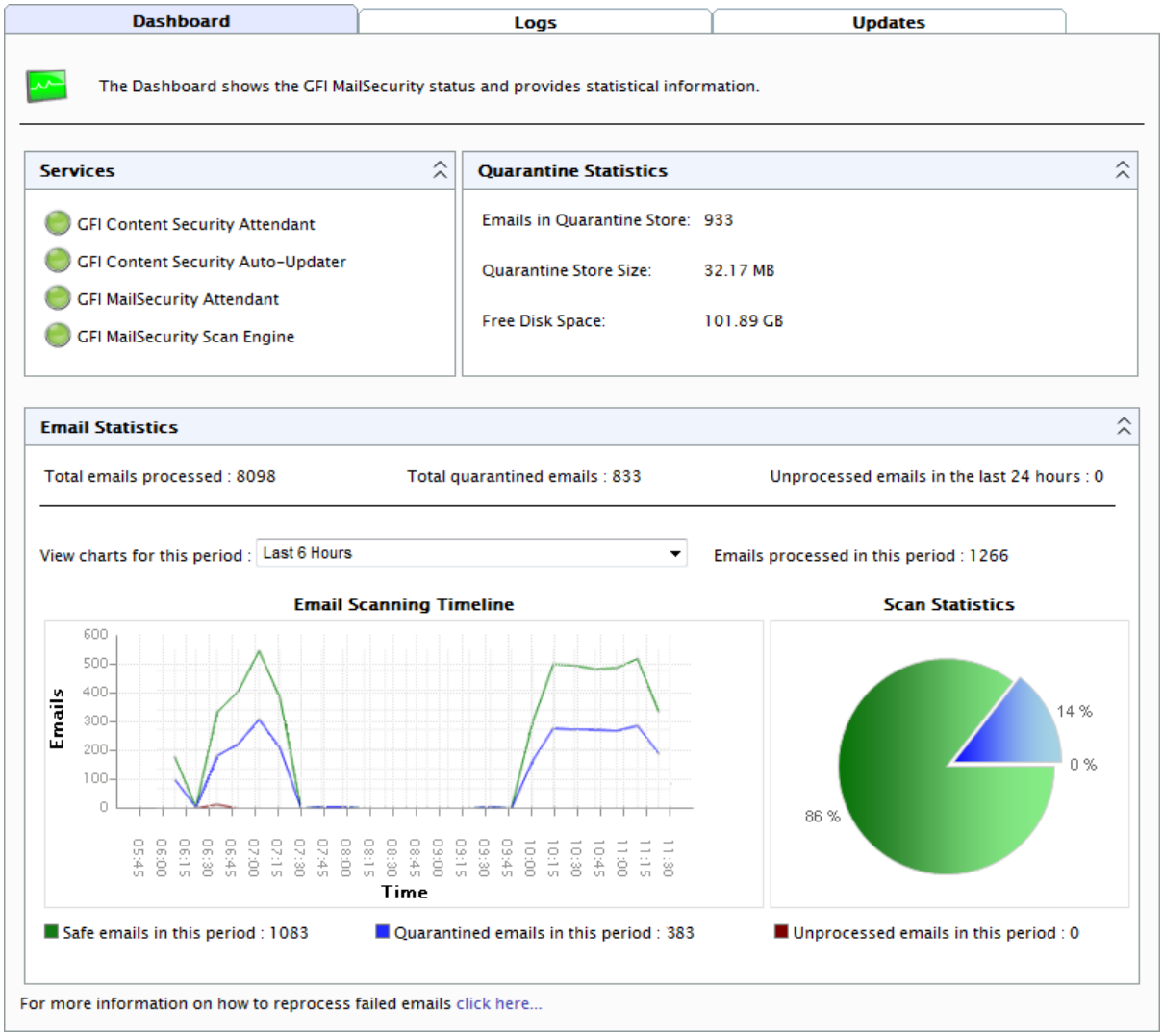
3.1 Introduction

The GFI MailSecurity Dashboard node provides important information in real time that enables you to monitor the functionality of GFI MailSecurity. This includes:

- Important statistical information about blocked emails
- Status of GFI MailSecurity services
- Graphical presentation of email activity
- List of emails processed
- Status of virus scanning engines updates

NOTE: Configure the refresh settings from the top side of the page. Select **Auto-refresh dashboard & logs** to automatically refresh the page at a particular interval. To change the time interval, key in a custom value in the **Refresh time interval in seconds** box and click **Set Interval**. You can also click **Refresh** to refresh the page manually.

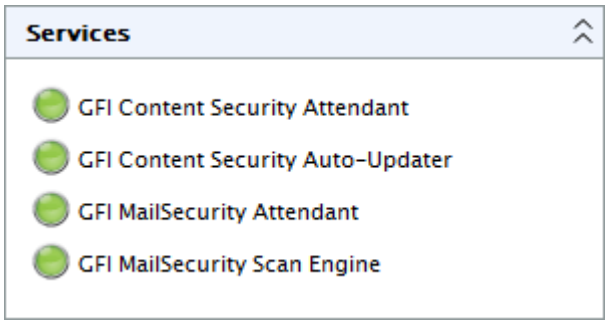
3.2 Status and statistical information


Dashboard
Logs
Updates
The Dashboard shows the GFI MailSecurity status and provides statistical information.
Services
GFI Content Security Attendant
GFI Content Security Auto-Updater
GFI MailSecurity Attendant
GFI MailSecurity Scan Engine
Quarantine Statistics
Emails in Quarantine Store: 933
Quarantine Store Size: 32.17 MB
Free Disk Space: 101.89 GB
Email Statistics
Total emails processed : 8098
Total quarantined emails : 833
Unprocessed emails in the last 24 hours : 0
View charts for this period : Last 6 Hours
Emails processed in this period : 1266
Email Scanning Timeline
Emails
Time
Scan Statistics
14 %
0 %
86 %
Safe emails in this period : 1083
Quarantined emails in this period : 383
Unprocessed emails in this period : 0
For more information on how to reprocess failed emails click here...

Screenshot 3 - The GFI MailSecurity Dashboard

Navigate to **GFI MailSecurity ► Dashboard** to open the Dashboard page. This page displays GFI MailSecurity statistics, status of services and a graphical presentation of email activity. More details on these sections are provided below.

Services



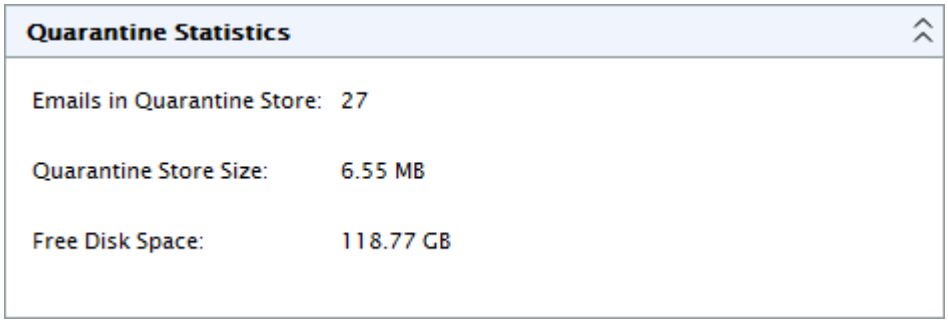
Screenshot 4 - The GFI MailSecurity Services

The **Services** area displays the status of the GFI MailSecurity services.

	Indicates that the service is started.
	Indicates that the service is stopped.

NOTE: Start or stop services from the Microsoft Windows Services console. To launch the Services console, navigate to **Start ► Run**, key in **services.msc** and click **OK**.

Quarantine Statistics

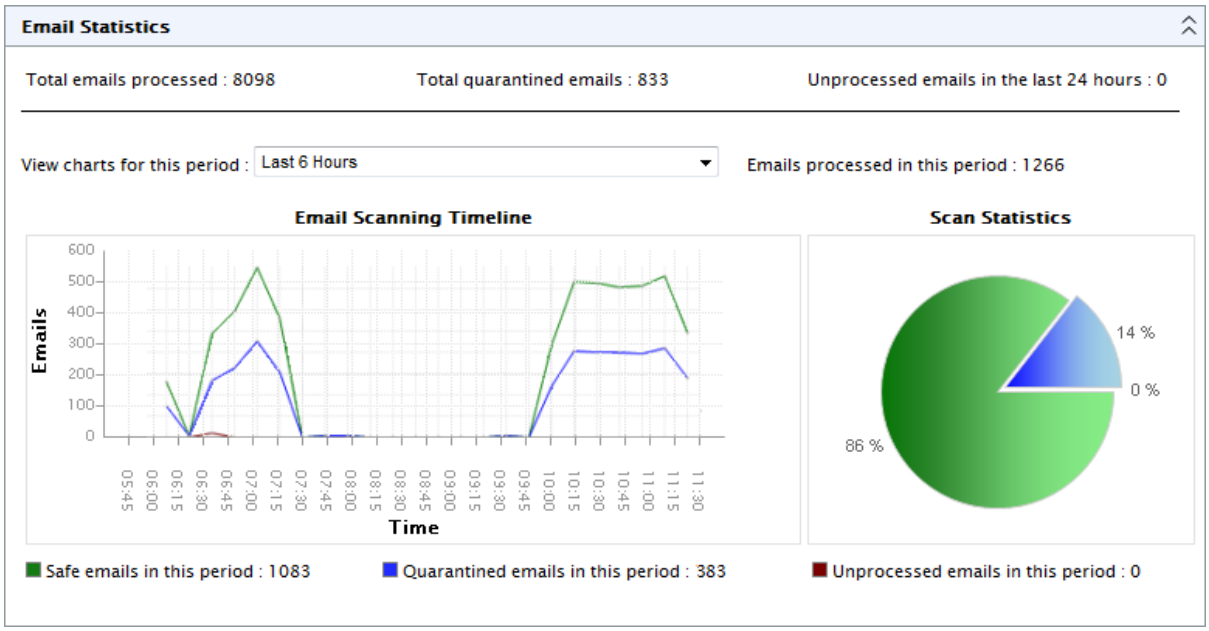


Screenshot 5 - The GFI MailSecurity Quarantine Statistics

The **Quarantine Statistics** area displays the following statistical information:

Emails in Quarantine Store	The number of emails stored in the Quarantine Store.
Quarantine Store size	The size on disk of the Quarantine Store database.
Free disk space	The free space on the disk where the Quarantine Store is saved.

Email Statistics


Email Statistics
Total emails processed : 8098
Total quarantined emails : 833
Unprocessed emails in the last 24 hours : 0
View charts for this period :
Last 6 Hours
Emails processed in this period : 1266
Email Scanning Timeline
Scan Statistics
Emails
Time
14 %
0 %
86 %
Safe emails in this period : 1083
Quarantined emails in this period : 383
Unprocessed emails in this period : 0

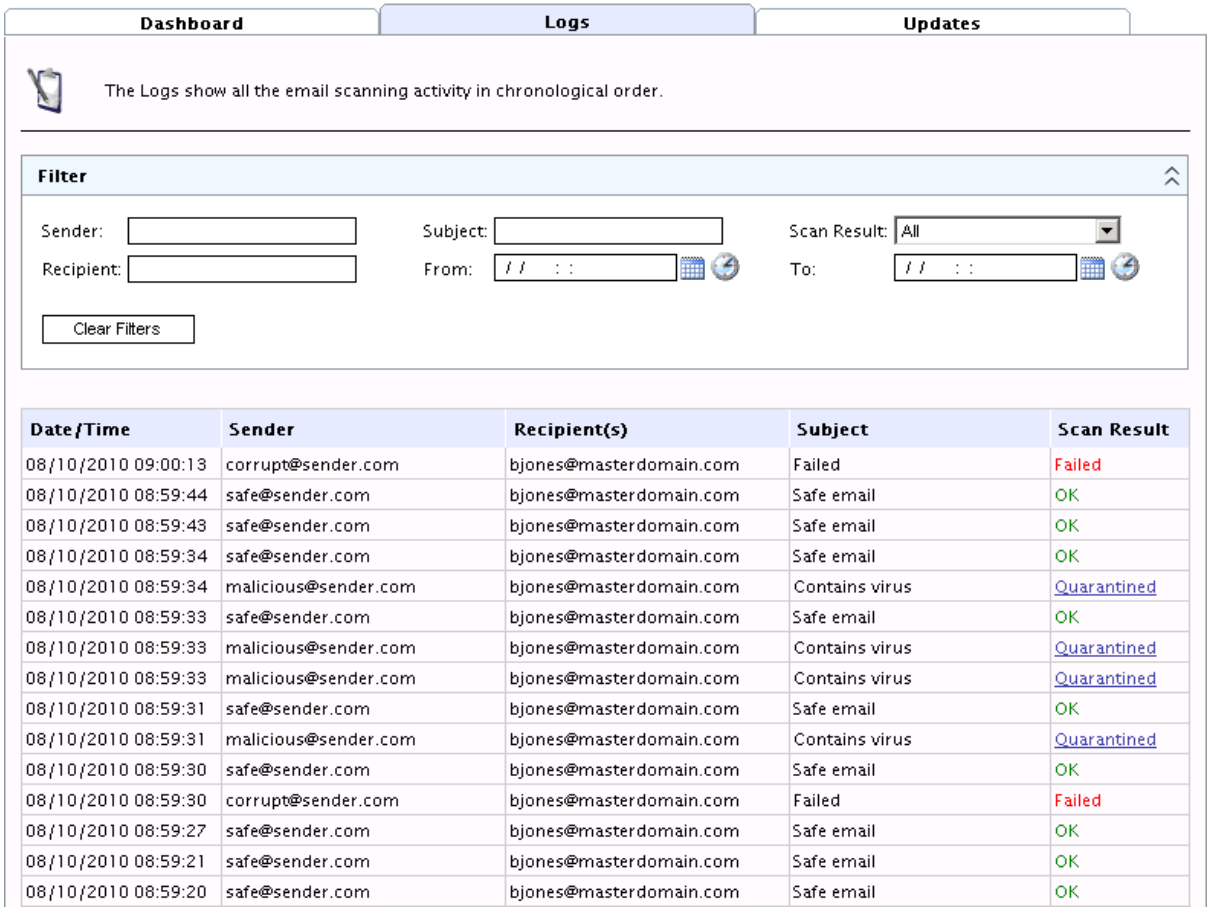
Screenshot 6 - The GFI MailSecurity Charts

The **Charts** area displays graphical information about emails processed by GFI MailSecurity. Select the time period from the drop-down list to display information for that period in the charts.

Total emails processed/ **Total quarantined emails/** **Unprocessed emails in the last 24 hours**	Shows various global statistics, including total number of emails scanned and quarantined by GFI MailSecurity since installation, and unprocessed emails in the last 24 hours.
View charts for this period	Enables you to select a period for which to view charts. Available options are: • Last 6 hours • Last 24 hours • Last 48 hours • Last 7 days **NOTE:** Options displayed depend on how long GFI MailSecurity has been installed. For example, if GFI MailSecurity was installed 24 hours ago, Last 48 hours and Last 7 days options are not available.
Email scanning timeline (time graph)	Shows a time graph in intervals for the time period selected. The graph shows the number of safe, quarantined and failed emails.
Scan statistics (pie chart)	A graphical distribution of the total number of safe, quarantined and failed emails for the time period selected.
Safe emails in this period/ **Quarantined emails in this period/**	Shows the number of safe, quarantined and unprocessed emails in the selected period.

Unprocessed emails in this period	

3.3 Email processing logs



Date/Time	Sender	Recipient(s)	Subject	Scan Result
08/10/2010 09:00:13	corrupt@sender.com	bjones@masterdomain.com	Failed	Failed
08/10/2010 08:59:44	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:43	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:34	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:34	malicious@sender.com	bjones@masterdomain.com	Contains virus	Quarantined
08/10/2010 08:59:33	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:33	malicious@sender.com	bjones@masterdomain.com	Contains virus	Quarantined
08/10/2010 08:59:33	malicious@sender.com	bjones@masterdomain.com	Contains virus	Quarantined
08/10/2010 08:59:31	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:31	malicious@sender.com	bjones@masterdomain.com	Contains virus	Quarantined
08/10/2010 08:59:30	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:30	corrupt@sender.com	bjones@masterdomain.com	Failed	Failed
08/10/2010 08:59:27	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:21	safe@sender.com	bjones@masterdomain.com	Safe email	OK
08/10/2010 08:59:20	safe@sender.com	bjones@masterdomain.com	Safe email	OK

Screenshot 7 - Email processing logs

From GFI MailSecurity, you can monitor all processed emails in real time. Navigate to **GFI MailSecurity ► Dashboard** and select the **Logs** tab to display the list of processed emails. The following details are displayed for each email processed:

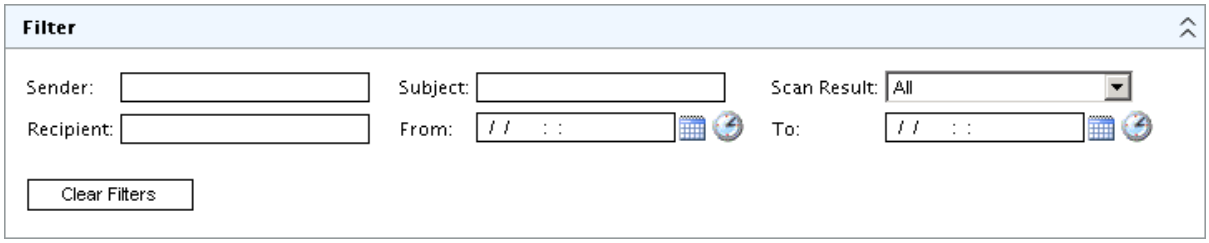
- Date/Time
- Sender
- Recipient(s)
- Subject
- Scan Result

The **Scan Result** column shows the action taken on the email.

OK	Email is not blocked by GFI MailSecurity, and is delivered to its intended recipients.
Quarantined	Email is blocked by an engine or filter that has the action set to Quarantine. Click **Quarantine** to review the email.

	NOTE: The email cannot be previewed in quarantine if it was manually deleted or it was blocked by a rule configured to save emails to a folder on disk.
Deleted	Email is blocked by an engine or filter with the action set to delete detected emails.
Failed	Email could not be scanned by GFI MailSecurity. Email is moved to the following folder: *<GFI MailSecurity installation path>*\GFI\Content Security\MailSecurity\FailedMails For more information about failed emails refer to http://kbase.gfi.com/showarticle.asp?id=KBID003263.

Filtering the email processing logs



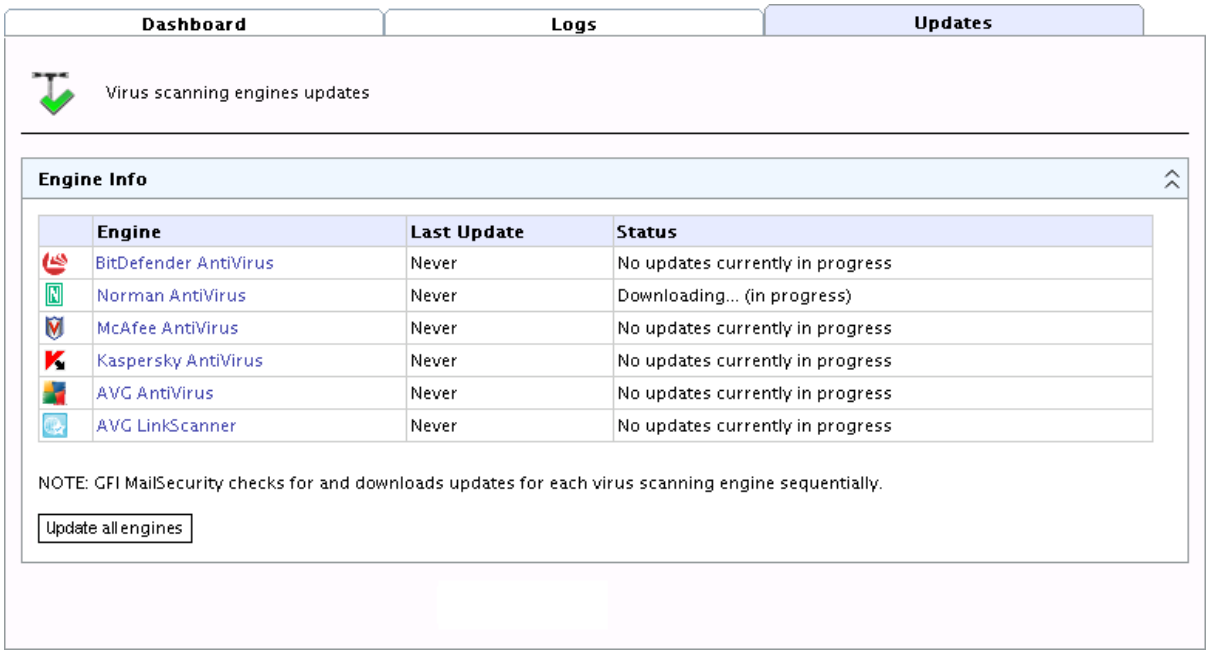
Screenshot 8 - Email processing logs filter

Filtering the email processing logs simplifies the reviewing process by providing the possibility to find particular emails. From the **Filter** area, specify any of the following criteria:

Sender	Specify the full or part of an email address to display only the emails sent by matching senders.
Recipient	Specify the full or part of an email address to display only the emails sent to matching recipients.
Subject	Specify the full or part of an email subject to display only the emails with a matching subject.
Scan result	From the drop-down list, select whether to display only emails with a particular scan result (for example, quarantined emails only)
From & To	Specify a date and time range to display emails processed during that particular period.

NOTE: Click **Clear Filters** to remove specified filters and to show all email logs.

3.4 Virus scanning engine updates



Screenshot 9 - Virus scanning engines updates

The updates of virus scanning engines can be monitored from a central configuration page. Navigate to **GFI MailSecurity ► Dashboard** and select the **Updates** tab to review the following update information:

Engine	Virus scanning engines
Last Update	Displays the date and time of the last successful update.
Status	Shows the current status of the updating process.

Click **Update all engines** to check for, and download, all updates.

The updates are checked for, and downloaded, as configured in the virus scanning engine configuration pages. Click on the engine name to load the configuration pages and navigate to the **Updates** tab. For more information refer to Virus scanner updates section.

NOTE: Updates for each virus scanning engine are checked for and downloaded sequentially (one virus scanning engine update at a time).

4 General settings

4.1 Introduction

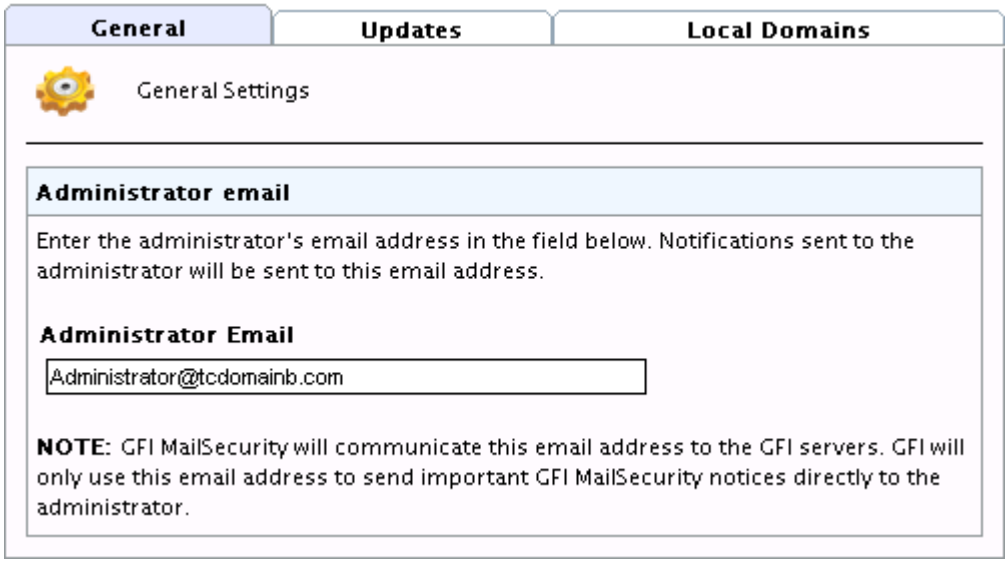
The **Settings** node enables you to configure a number of options.

- Administrator's email address
- Proxy settings for automatic updates
- The list of Local Domains.
- SMTP server bindings
- The list of local users

4.2 Configuring the administrator's email address

GFI MailSecurity sends important notifications to the administrator via email. To set up the administrator's email address:

1. From the GFI MailSecurity Configuration navigate to **GFI MailSecurity ► General ► Settings** and select the **General** tab.


General
Updates
Local Domains
General Settings
Administrator email
Enter the administrator's email address in the field below. Notifications sent to the administrator will be sent to this email address.
Administrator Email
Administrator@tcdomainb.com
NOTE: GFI MailSecurity will communicate this email address to the GFI servers. GFI will only use this email address to send important GFI MailSecurity notices directly to the administrator.

Screenshot 10 - Specifying the administrator's email address

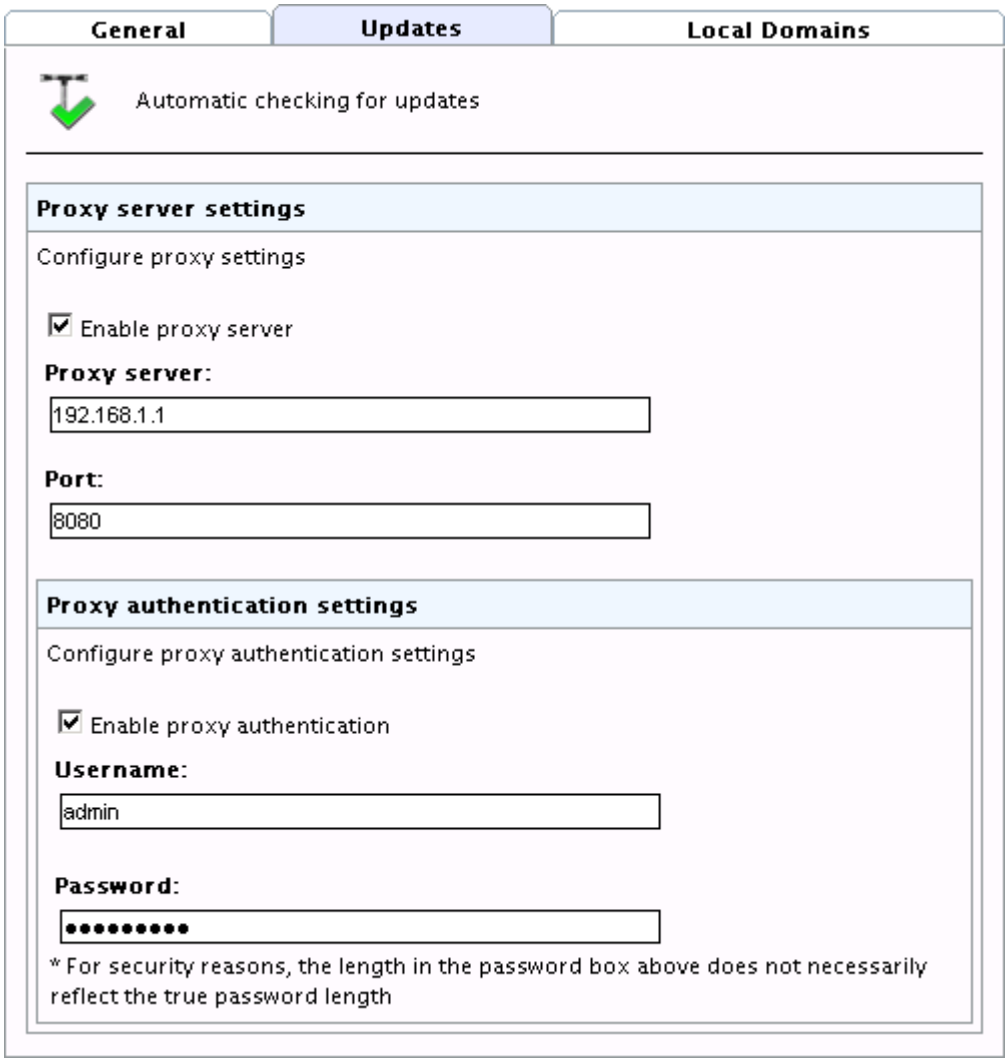
2. Key in the administrator's email address in the **Administrator email** area.

3. Click **Apply**.

4.3 Configuring proxy server settings for automatic updates

GFI MailSecurity automatically searches for and downloads updates (for example, virus definitions updates and Trojan & Executable Scanner definitions) from the GFI update servers. If the server on which GFI MailSecurity is installed, connects to the internet through a proxy server, configure the proxy server settings as follows:

1. From the GFI MailSecurity Configuration navigate to **GFI MailSecurity ► General ► Settings** and select **Updates** tab.



Screenshot 11 - Updates server proxy settings

2. Select the **Enable proxy server** checkbox.

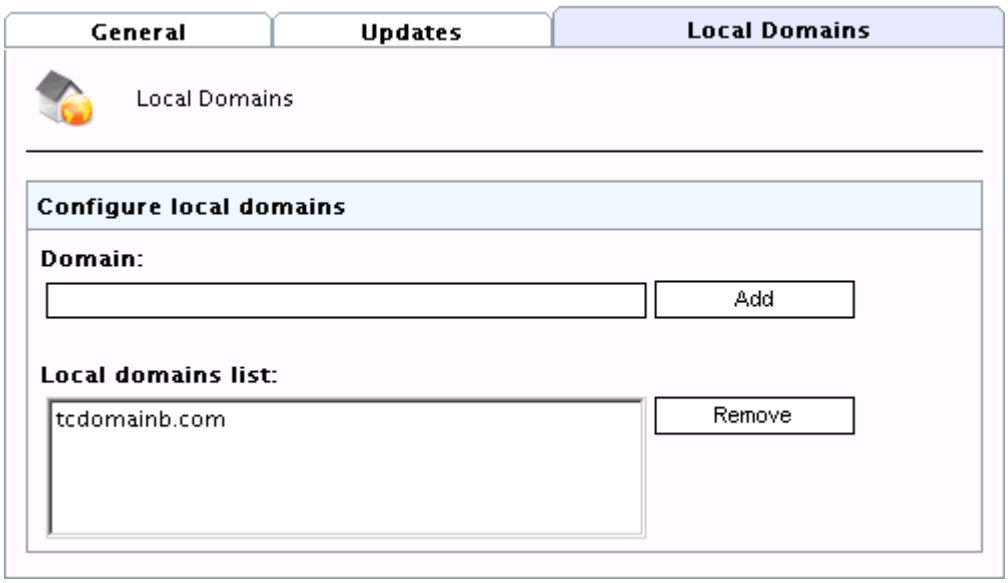
3. In the **Proxy server** field key in the Machine Name or IP address of the proxy server.

4. In the **Port** field, key in the port to connect on (default value is 8080).

5. If the proxy server requires authentication, select the **Enable proxy authentication** check box and key in the user name and password in the **Username** and **Password** fields respectively.

6. Click **Apply**.

4.4 Adding Local Domains



Screenshot 12 - Local Domains list

GFI MailSecurity requires the list of local domains to enable it to distinguish between inbound, outbound or internal emails. During installation, GFI MailSecurity automatically imports local domains from the IIS SMTP service. If, however, you wish to add or remove local domains after installation, follow these steps:

1. From the GFI MailSecurity Configuration navigate to **GFI MailSecurity ► General ► Settings** and select **Local Domains** tab.

2. Key in the name of the domain to add in the **Domain** text box.

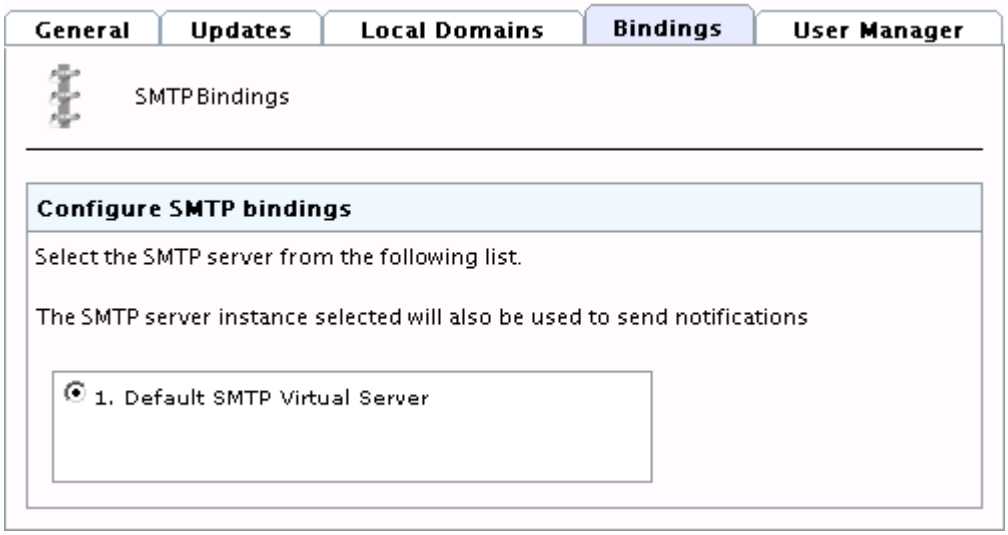
3. Click **Add** to include the stated domain in the **Local domains list**.

NOTE: To remove a listed domain, select it from the list and click **Remove**.

4. Click **Apply**.

4.5 SMTP server bindings

NOTE: The SMTP Server bindings tab is not available when GFI MailSecurity is installed on a Microsoft Exchange Server 2007/2010 machine.



Screenshot 13 - Binding GFI MailSecurity to a different SMTP Server

GFI MailSecurity relies on the IIS SMTP service to send and receive emails. By default, it binds to your default SMTP virtual server. If however, you have multiple SMTP virtual servers installed on your machine, select to which one you want to bind GFI MailSecurity. You can select your virtual SMTP server both during the installation stage as well as from the **Bindings** tab after the installation. To change the current SMTP Virtual Server:

1. From the GFI MailSecurity Configuration navigate to **GFI MailSecurity ► General ► Settings** and select **Bindings** tab.

2. Select the required SMTP Virtual Server from the detected list of servers present in your domain.

3. Click **Apply**.

4.6 Managing local users

GFI MailSecurity uses 3 ways to retrieve users depending on the installation environment.

NOTE: The number of users retrieved is also used for licensing purposes.

4.6.1 GFI MailSecurity installed in Active Directory mode

When GFI MailSecurity is not installed on the same machine as your mail server and Active Directory is present, then GFI MailSecurity retrieves mail-enabled users from the Active Directory domain of which the GFI MailSecurity machine forms part.

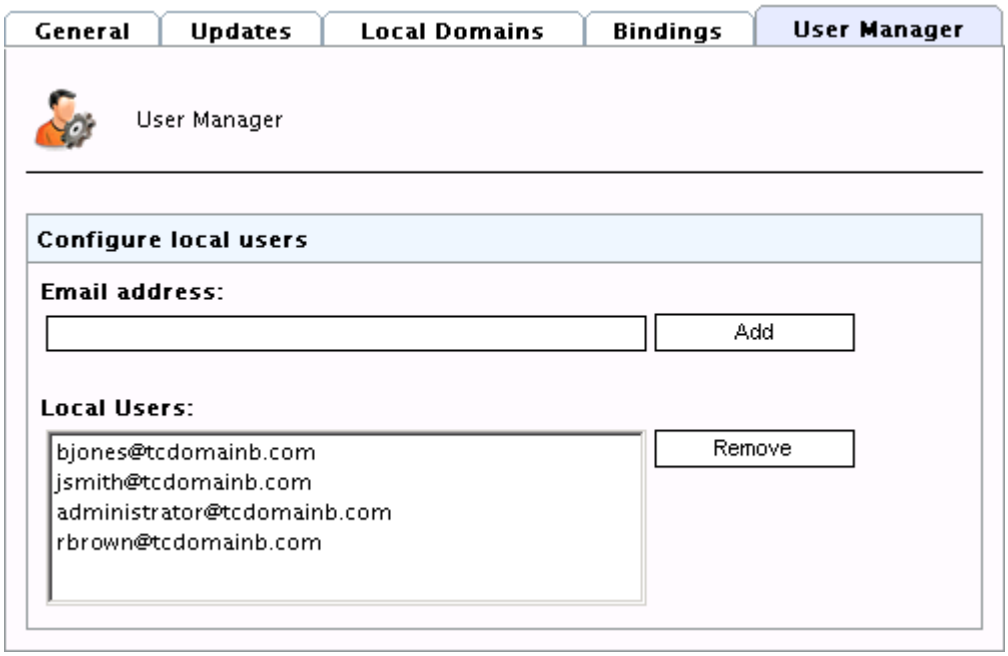
GFI MailSecurity installed on the Microsoft Exchange machine

When GFI MailSecurity is installed on the same machine as Microsoft Exchange, GFI MailSecurity retrieves the users that have a mailbox on the same Microsoft Exchange Server.

4.6.2 GFI MailSecurity installed in SMTP mode

When you choose to install GFI MailSecurity in SMTP mode, the list of local users is stored in a database managed by GFI MailSecurity.

To populate and manage the user list when GFI MailSecurity is installed in SMTP mode, navigate to **GFI MailSecurity ► General ► Settings ► User Manager** tab.



Screenshot 14 - User Manager

The **User Manager** tab displays the list of local users, and allows you to add or remove local users. The list of local users is used when configuring user-based rules, such as Attachment Filtering rules and Content Filtering rules.

NOTE: GFI MailSecurity automatically populates the list of local users using the sender's email address in outbound emails.

To add a new local user:

1. Enter the email address in the **Email address** box.
2. Click **Add**.
3. Repeat to add more local users and click **Apply**.

To remove a local user:

1. Select the local user you want to remove from the **Local Users** list and click **Remove**.
2. Repeat to remove more local users and click **Apply**.

5 Configuring Virus Scanning Engines

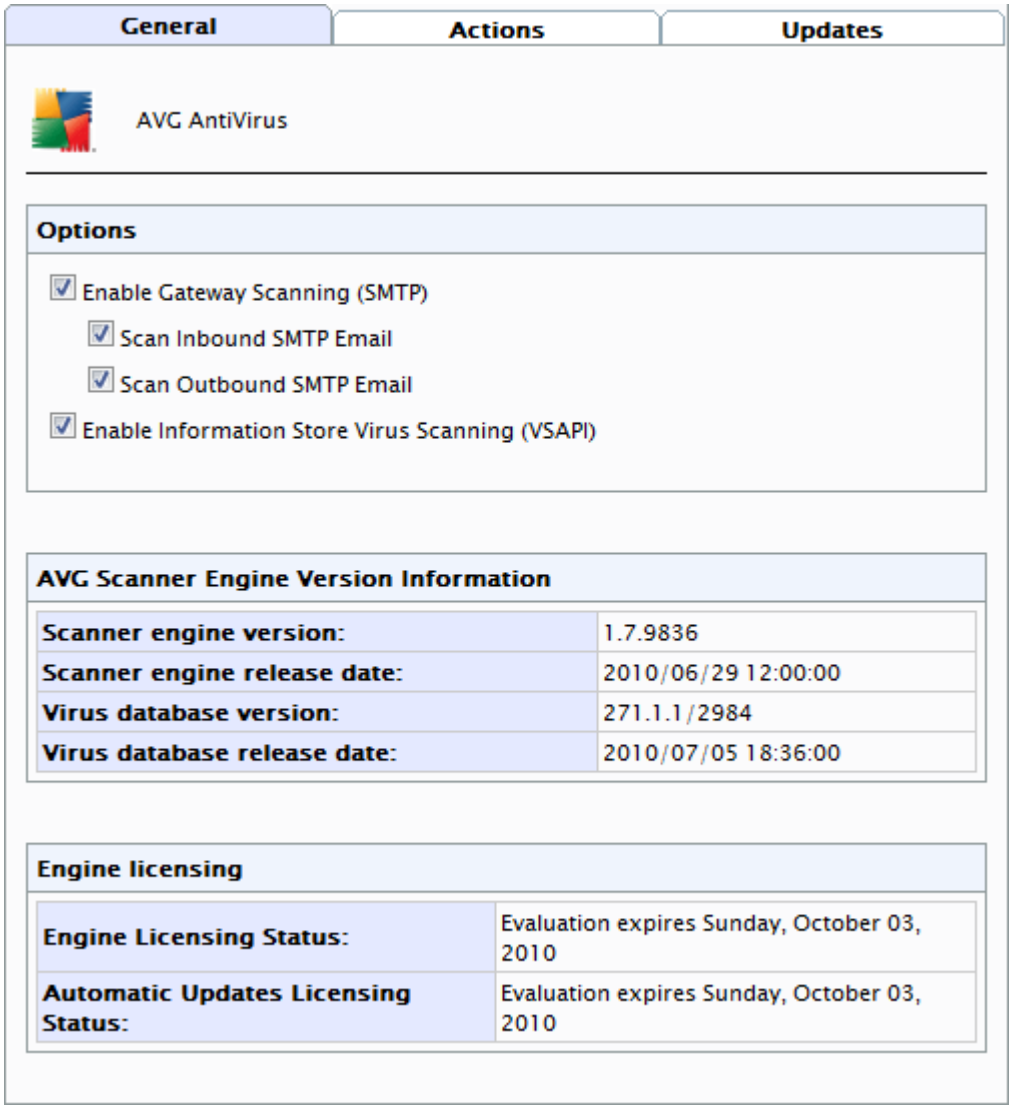
5.1 Introduction

GFI MailSecurity uses multiple Virus Scanning Engines to scan all emails for the presence of viruses. As part of its standard package, GFI MailSecurity ships with Norman and BitDefender Virus Scanning Engines. You can also acquire a license for the following anti-virus engines:

- AVG
- Kaspersky
- McAfee

This chapter describes how to configure Virus Scanning Engines, updates, actions and the scanning sequence.

5.2 AVG configuration


General
Actions
Updates
AVG AntiVirus
Options
Enable Gateway Scanning (SMTP)
Scan Inbound SMTP Email
Scan Outbound SMTP Email
Enable Information Store Virus Scanning (VSAPI)
AVG Scanner Engine Version Information
Scanner engine version: 1.7.9836
Scanner engine release date: 2010/06/29 12:00:00
Virus database version: 271.1.1/2984
Virus database release date: 2010/07/05 18:36:00
Engine licensing
Engine Licensing Status: Evaluation expires Sunday, October 03, 2010
Automatic Updates Licensing Status: Evaluation expires Sunday, October 03, 2010

Screenshot 15 - Anti-virus Scanning Engines: AVG configuration page (General Tab)

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► AVG Anti-Virus**.

NOTE: In this page, you can also review the anti-virus engine licensing and version information.

2. Select **Enable Gateway Scanning (SMTP)** check box, to scan SMTP traffic using this Virus Scanning Engine.

3. Select whether to scan inbound and/or outbound emails using this Virus Scanning Engine.

Scan inbound SMTP email	Select this option to scan incoming emails
Scan outbound SMTP email	Select this option to scan outgoing emails

4. If you installed GFI MailSecurity on the Microsoft Exchange machine, you will also have the option to scan the Information Store using this Virus Scanning Engine. To scan the Information Store select the **Enable Information Store Virus Scanning (VSAPI)** check box.

NOTE: To be able to use the Information Store Virus Scanning feature, you must enable the option from **Information Store Protection** node. For more information about Information Store Protection, refer to Configuring Information Store Scanning section in this chapter.

5. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

6. Select **Updates** tab to configure the update options for this anti-virus engine. Refer to the Virus scanner updates section in this chapter.

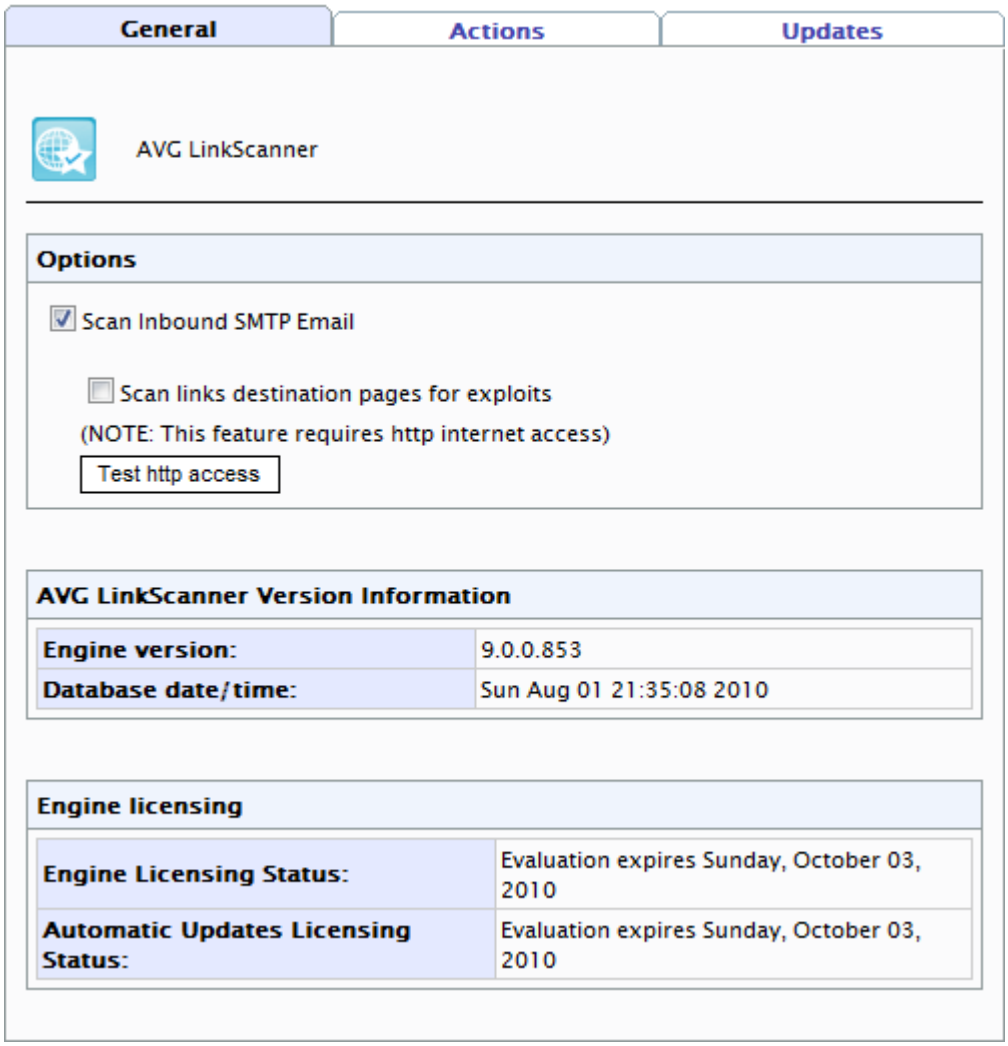
7. Click **Apply** to save changes.

AVG web site

For more information about AVG anti-virus engine, visit the AVG website at http://www.avg.com.

5.2.1 AVG LinkScanner

When using the AVG Anti-Virus engine, it is also possible to use the AVG LinkScanner to block emails that contain links to known malicious web pages. The AVG LinkScanner checks each link in an email against a list of URLs that are known sources of exploits and other malicious content. AVG LinkScanner can also be configured to scan the content of links' destination pages for exploits.



Screenshot 16 - AVG LinkScanner options

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► AVG Anti-Virus ► AVG LinkScanner**.

2. Select **Scan inbound SMTP emails** to scan incoming emails using AVG LinkScanner.

3. Select **Scan links destination pages for exploits** to check the content of links' destination pages for exploits. This feature requires HTTP access. Click **Test http access** to verify that AVG LinkScanner can access the links' destination pages.

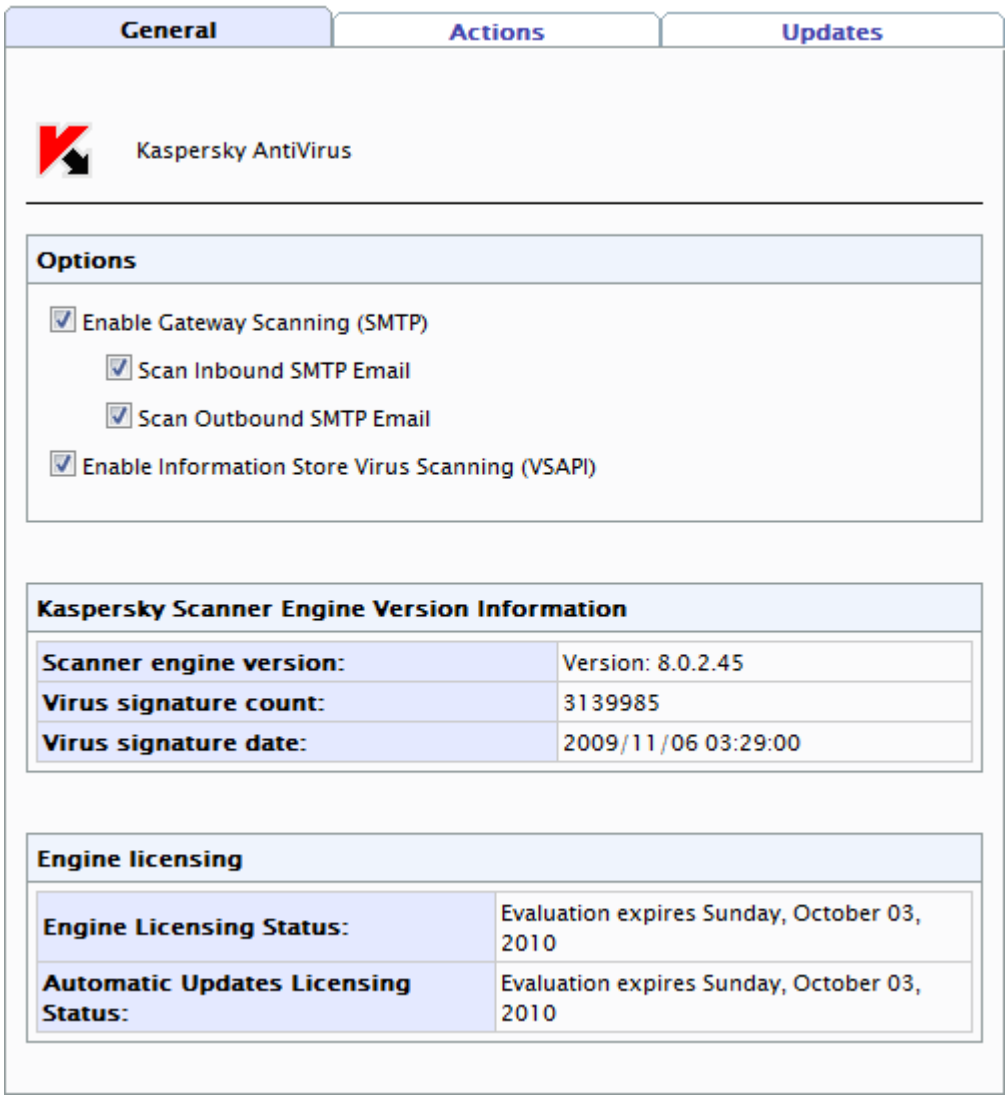
NOTE: If test fails, ensure that the GFI MailSecurity machine has internet connectivity. If the machine connects to the internet using a proxy server, configure proxy settings as described in section Configuring proxy server settings for automatic updates in this manual.

4. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

5. Select **Updates** tab to configure update options. Refer to the Virus scanner updates section in this chapter.

6. Click **Apply** to save changes.

5.3 Kaspersky configuration



Screenshot 17 - Anti-virus Scanning Engines: Kaspersky configuration page (General Tab)

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► Kaspersky Anti-Virus**.

NOTE: In this page you can also review the anti-virus engine licensing and version information.

2. Select **Enable Gateway Scanning (SMTP)** check box, to scan SMTP traffic using this Virus Scanning Engine.

3. Select whether to scan inbound and/or outbound emails using this Virus Scanning Engine.

Scan inbound SMTP email	Select this option to scan incoming emails
Scan outbound SMTP email	Select this option to scan outgoing emails

4. If you installed GFI MailSecurity on the Microsoft Exchange machine, you will also have the option to scan the Information Store using this Virus Scanning Engine. To scan the Information Store select the **Enable Information Store Virus Scanning (VSAPI)** check box.

NOTE: To be able to use the Information Store Virus Scanning feature, you must enable the option from **Information Store Protection** node. For more information about Information Store Protection, refer to Configuring Information Store Scanning section in this chapter.

5. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

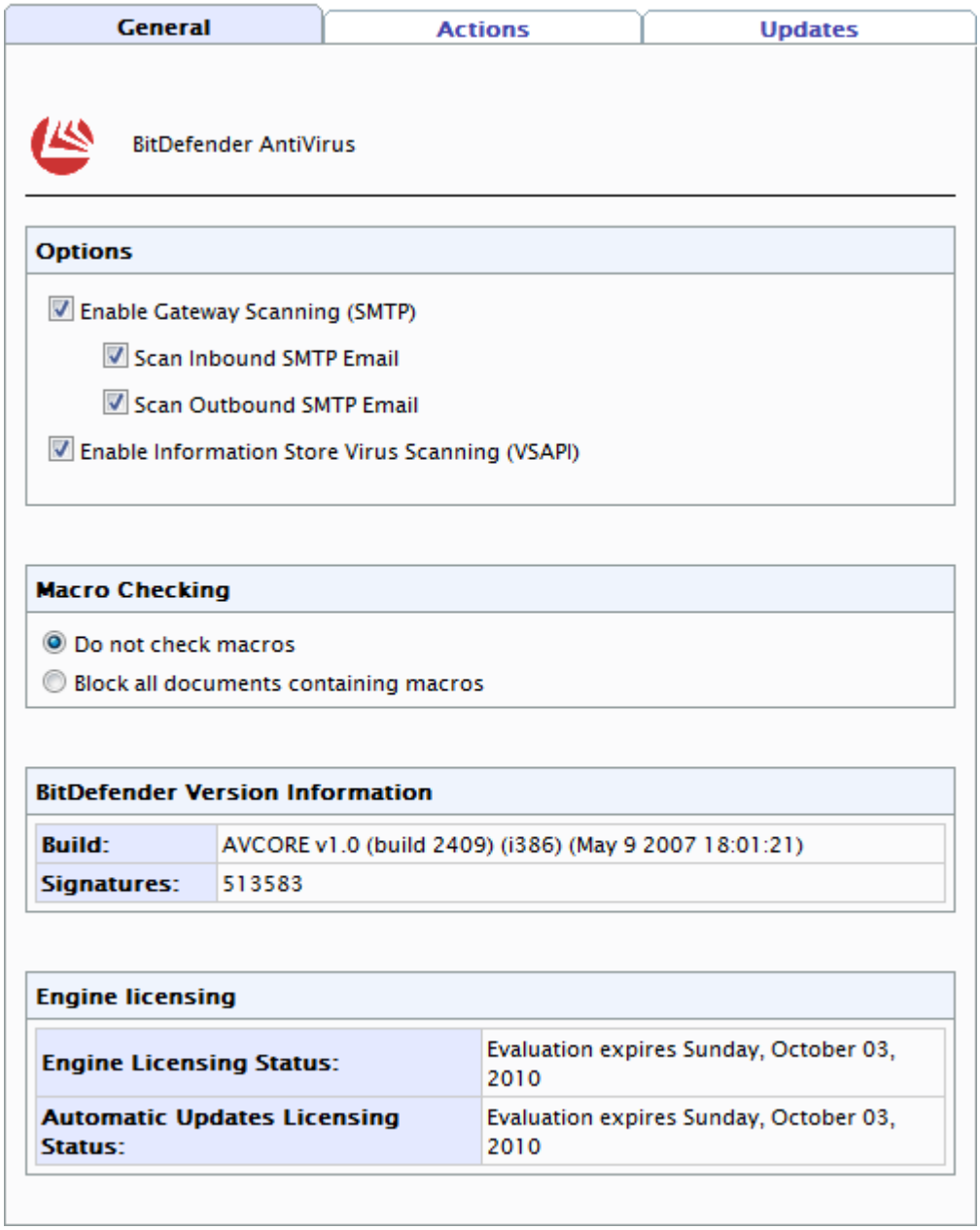
6. Select **Updates** tab to configure the update options for this anti-virus engine. Refer to the Virus scanner updates section in this chapter.

7. Click **Apply** to save changes.

Kaspersky web site

For more information about Kaspersky anti-virus engine, visit the Kaspersky website at http://www.kaspersky.com.

5.4 BitDefender configuration



Screenshot 18 - Virus Scanning Engines: BitDefender configuration page (General Tab)

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► BitDefender Anti-Virus**.

NOTE: In this page you can also review the anti-virus engine licensing and version information.

2. Select **Enable Gateway Scanning (SMTP)** check box, to scan SMTP traffic using this Virus Scanning Engine.

3. Select whether to scan inbound and/or outbound emails using this Virus Scanning Engine.

Scan inbound SMTP email	Select this option to scan incoming emails

Scan outbound SMTP email	Select this option to scan outgoing emails

4. If you installed GFI MailSecurity on the Microsoft Exchange machine, you will also have the option to scan the Information Store using this Virus Scanning Engine. To scan the Information Store select the **Enable Information Store Virus Scanning (VSAPI)** check box.

NOTE: To be able to use the Information Store Virus Scanning feature, you must enable the option from **Information Store Protection** node. For more information about Information Store Protection, refer to Configuring Information Store Scanning section in this chapter.

5. BitDefender can also be used to block emails with attachments that contain macros. Enable this feature from the **Macro Checking** area by selecting **Block all documents containing macros**.

6. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

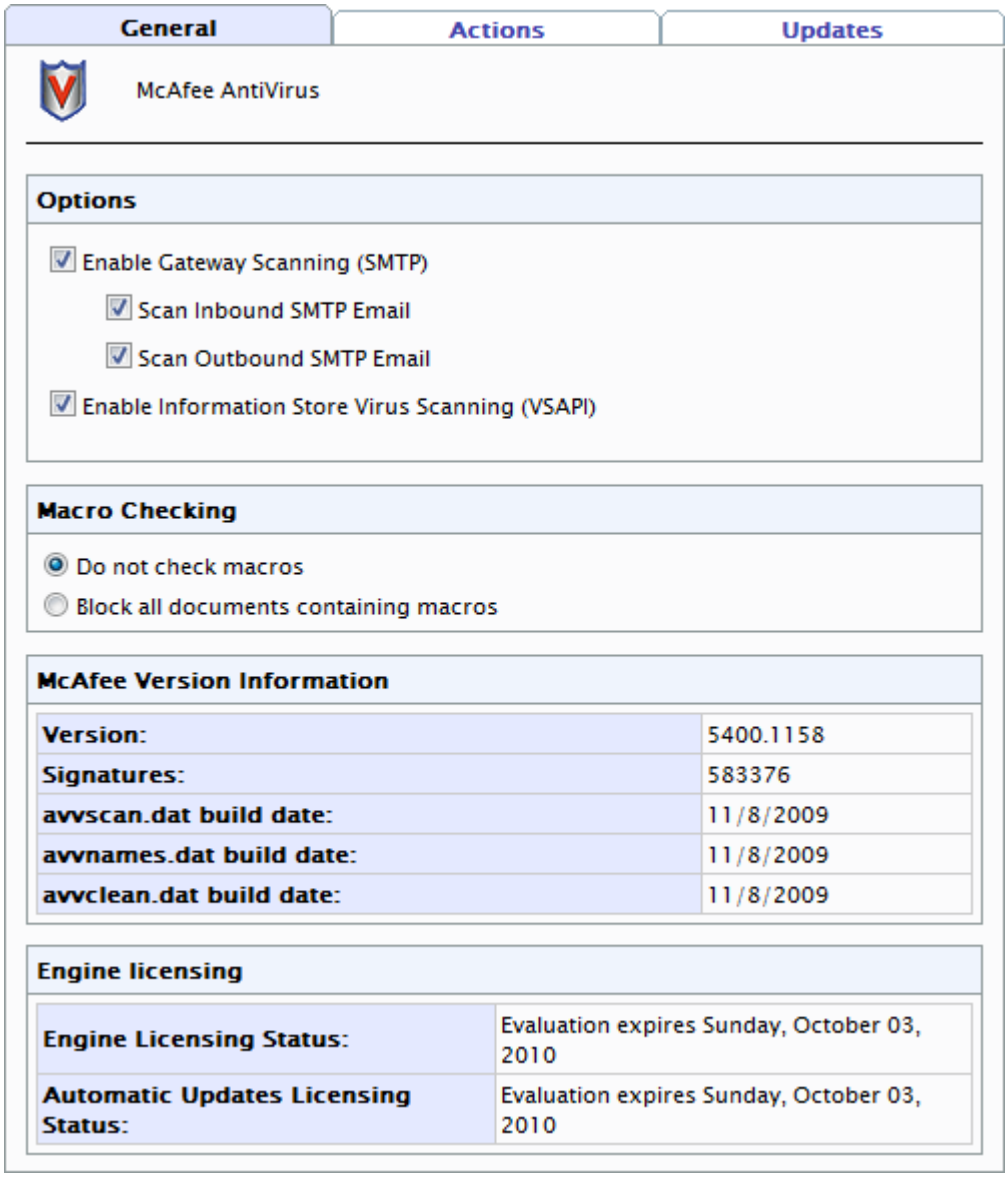
7. Select **Updates** tab to configure the update options for this anti-virus engine. Refer to the Virus scanner updates section in this chapter.

8. Click **Apply** to save changes.

BitDefender website

For more information about BitDefender anti-virus engine, visit the BitDefender website at http://www.bitdefender.com

5.5 McAfee configuration



Screenshot 19 - Virus Scanning Engines: McAfee configuration page (General Tab)

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► McAfee Anti-Virus**.

NOTE: In this page you can also review the anti-virus engine licensing and version information.

2. Select **Enable Gateway Scanning (SMTP)** check box, to scan SMTP traffic using this Virus Scanning Engine.

3. Select whether to scan inbound and/or outbound emails using this Virus Scanning Engine.

Scan inbound SMTP email	Select this option to scan incoming emails
Scan outbound SMTP email	Select this option to scan outgoing emails

4. If you installed GFI MailSecurity on the Microsoft Exchange machine, you will also have the option to scan the Information Store using this Virus Scanning Engine. To scan the Information Store select the **Enable Information Store Virus Scanning (VSAPI)** check box.

NOTE: To be able to use the Information Store Virus Scanning feature, you must enable the option from **Information Store Protection** node. For more information about Information Store Protection, refer to Configuring Information Store Scanning section in this chapter.

5. McAfee can also be used to block emails with attachments that contain macros. Enable this feature from the **Macro Checking** area by selecting **Block all documents containing macros**.

6. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

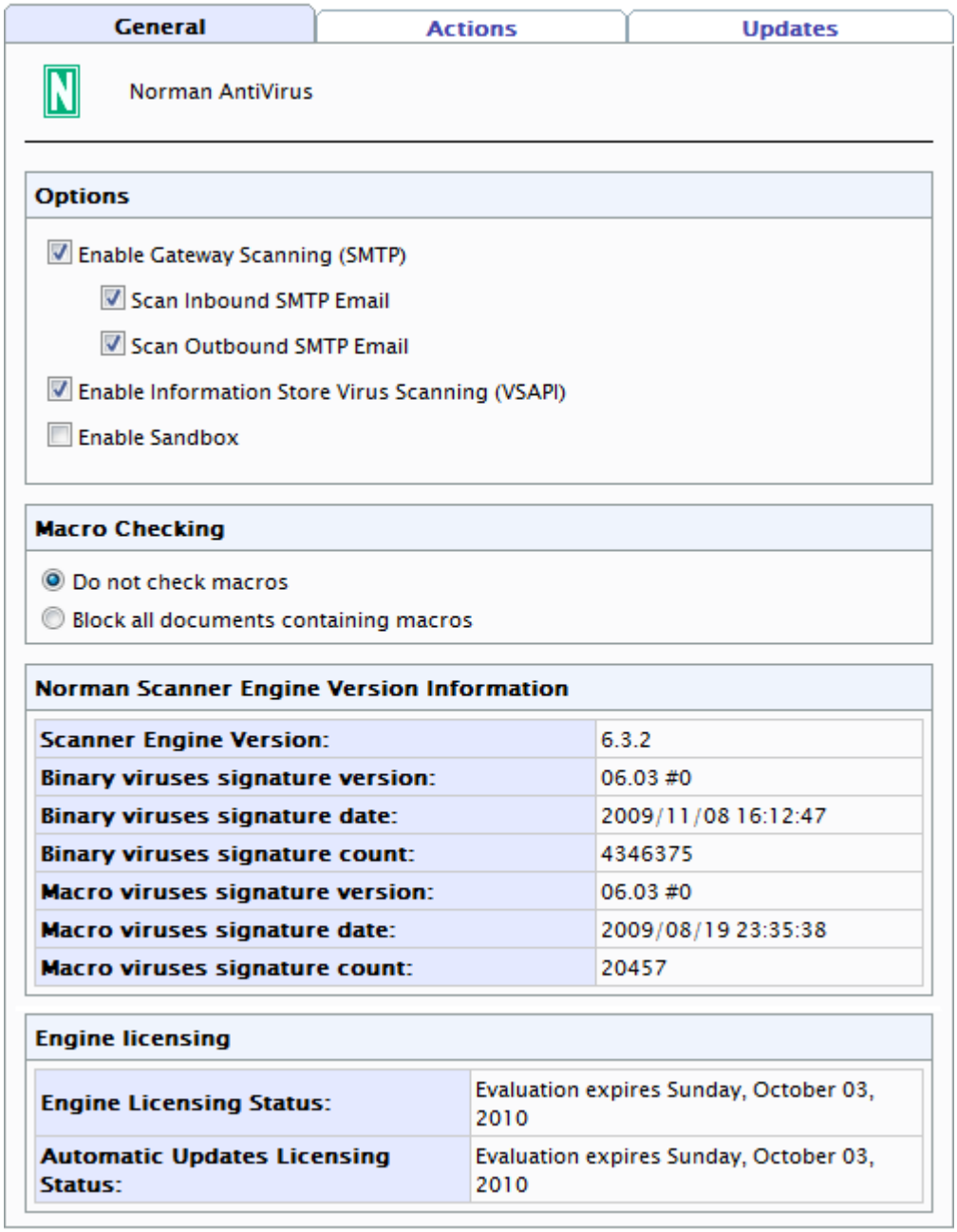
7. Select **Updates** tab to configure the update options for this anti-virus engine. Refer to the Virus scanner updates section in this chapter.

8. Click **Apply** to save changes.

McAfee website

For more information about McAfee anti-virus engine, visit the McAfee website at http://www.mcafee.com

5.6 Norman configuration


General
Actions
Updates
Norman AntiVirus
Options
Enable Gateway Scanning (SMTP)
Scan Inbound SMTP Email
Scan Outbound SMTP Email
Enable Information Store Virus Scanning (VSAPI)
Enable Sandbox
Macro Checking
Do not check macros
Block all documents containing macros
Norman Scanner Engine Version Information
Scanner Engine Version: 6.3.2
Binary viruses signature version: 06.03 #0
Binary viruses signature date: 2009/11/08 16:12:47
Binary viruses signature count: 4346375
Macro viruses signature version: 06.03 #0
Macro viruses signature date: 2009/08/19 23:35:38
Macro viruses signature count: 20457
Engine licensing
Engine Licensing Status: Evaluation expires Sunday, October 03, 2010
Automatic Updates Licensing Status: Evaluation expires Sunday, October 03, 2010

Screenshot 20 - Virus Scanning Engines: Norman configuration page

1. Navigate to **GFI MailSecurity ► Virus Scanning Engines ► Norman Anti-Virus**.

NOTE: In this page you can also review the anti-virus engine licensing and version information.

2. Select **Enable Gateway Scanning (SMTP)** check box, to scan SMTP traffic using this Virus Scanning Engine.

3. Select whether to scan inbound and/or outbound emails using this Virus Scanning Engine.

Scan inbound SMTP email	Select this option to scan incoming emails
Scan outbound SMTP email	Select this option to scan outgoing emails

4. Select **Enable Sandbox** to use the Norman Anti-Virus Sandbox feature. This executes email attachments in a virtual environment and monitors all actions and effects on a system. If an attachment exhibits viral behavior, email is marked as malicious and all appropriate actions are taken.

NOTE: Since this check is executed in a virtual environment, it does not pose any threats to the machine or network where GFI MailSecurity is installed.

5. If you installed GFI MailSecurity on the Microsoft Exchange machine, you will also have the option to scan the Information Store using this Virus Scanning Engine. To scan the Information Store select the **Enable Information Store Virus Scanning (VSAPI)** check box.

NOTE: To be able to use the Information Store Virus Scanning feature, you must enable the option from **Information Store Protection** node. For more information about Information Store Protection, refer to Configuring Information Store Scanning section in this chapter.

6. Norman can also be used to block emails with attachments that contain macros. Enable this feature from the **Macro Checking** area by selecting **Block all documents containing macros**.

7. Select **Actions** tab to configure the actions to take when this anti-virus engine finds malicious emails. Refer to the Virus scanner actions section in this chapter.

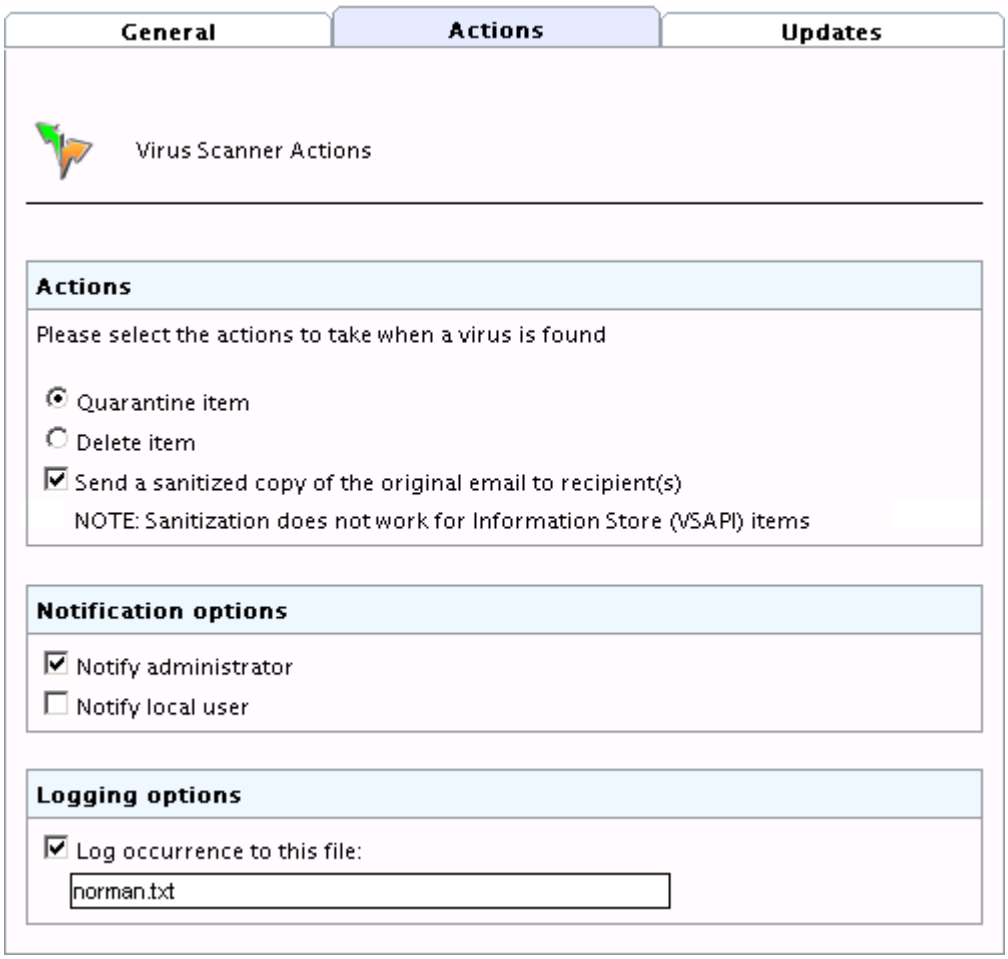
8. Select **Updates** tab to configure the update options for this anti-virus engine. Refer to the Virus scanner updates section in this chapter.

9. Click **Apply** to save changes.

Norman website

For more information about Norman Virus Control (NVC) anti-virus engine, visit the NVC website at http://www.norman.com

5.7 Virus scanner actions



Screenshot 21 - Virus Scanning Engine: Configuration page (Actions Tab)

In GFI MailSecurity, you can configure what each of the installed Virus Scanning Engines should do whenever an infected email is detected.

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content (e.g. the attachment) with a threat report.

1. Select the virus scanner that you want to configure actions for and select the **Actions** tab.

2. Choose the action to take when an email is blocked:

Quarantine item	Stores all infected emails detected by the selected Virus Scanning Engine in the Quarantine Store. You can subsequently review (approve/delete) all the quarantined emails. For more information about Quarantine refer to the Quarantine chapter in this manual.
Delete item	Deletes infected emails.

3. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

NOTE: This feature is not applicable to emails scanned using the Information Store Virus Scanning feature.

4. GFI MailSecurity can send email notifications whenever an infected inbound email is detected. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever the virus scanner detects an infected email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked malicious email.

5. To log the virus scanning activity to a log file select **Log occurrence to this file**. In the text box specify:

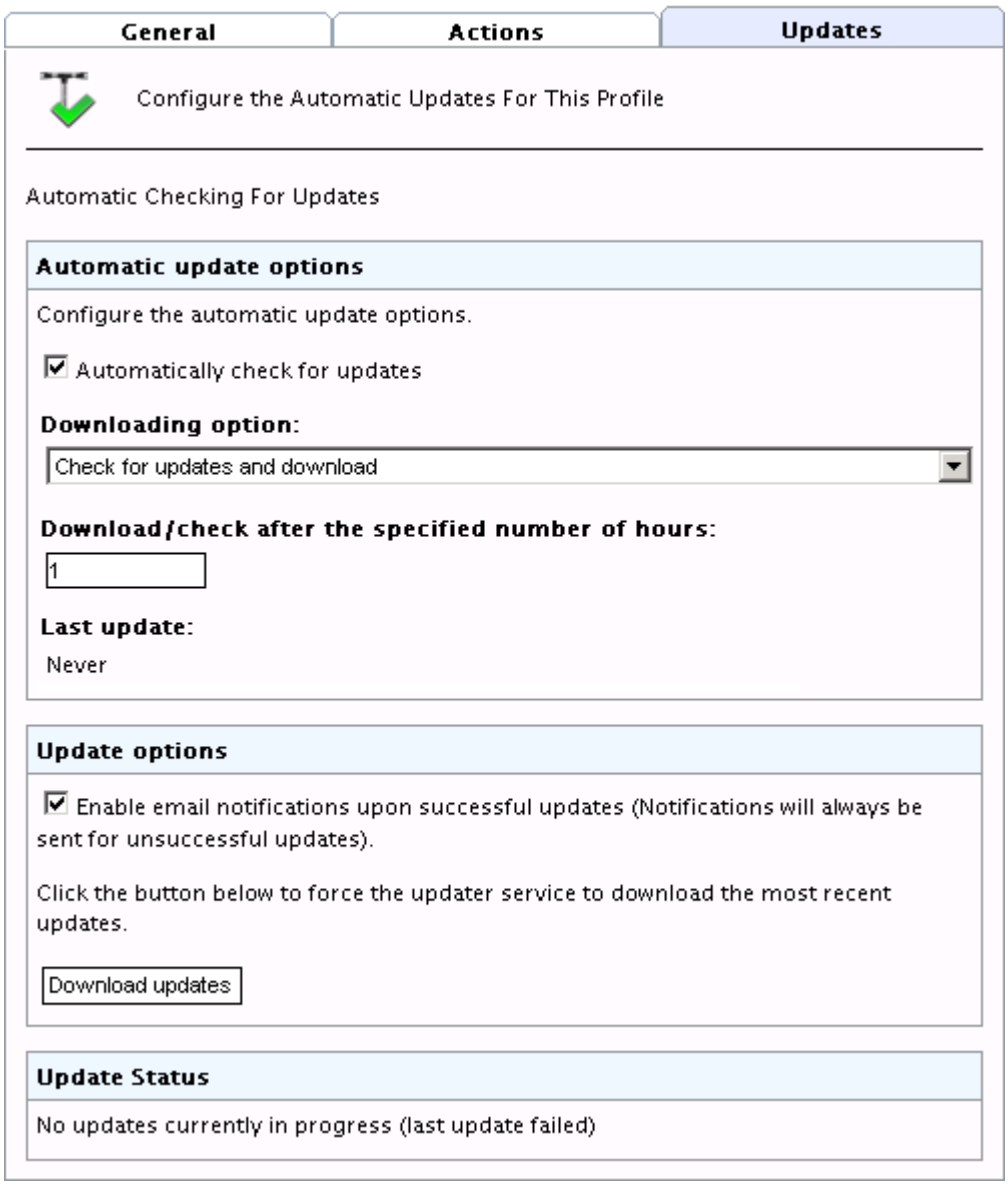
- Path and file name to a custom location on disk where to store the log file

or

- The file name only. The log file will be stored in the following default location:

  <*GFI MailSecurity installation path*>\ContentSecurity\MailSecurity\Logs\<*filename.txt*>

5.8 Virus scanner updates


General
Actions
Updates
Configure the Automatic Updates For This Profile
Automatic Checking For Updates
Automatic update options
Configure the automatic update options.
Automatically check for updates
Downloading option:
Check for updates and download
Download/check after the specified number of hours:
1
Last update:
Never
Update options
Enable email notifications upon successful updates (Notifications will always be sent for unsuccessful updates).
Click the button below to force the updater service to download the most recent updates.
Download updates
Update Status
No updates currently in progress (last update failed)

Screenshot 22 - Virus Scanning Engines: Configuration page (Updates Tab)

You can configure GFI MailSecurity to download virus scanner updates automatically or to notify the administrator whenever new updates are available.

1. Select the virus scanner to configure and select the **Updates** tab.

2. Select the **Automatically check for updates** check box to enable anti-virus engine auto-update.

3. From the **Downloading option** list, select one of the following options:

Only check for updates	Select this option if you want GFI MailSecurity to just check for and notify the administrator when updates are available for the virus scanner. This option will NOT download the available updates automatically.

Check for updates and download	Select this option if you want GFI MailSecurity to check for and automatically download any updates available for the virus scanner.

4. Specify how often you want GFI MailSecurity to check/download updates for this Virus Scanning Engine, by specifying an interval value in hours.

5. In the **Update options** area, select **Enable email notifications upon successful updates** to send an email notification to the administrator whenever the virus scanning engine updates successfully.

NOTE: An email notification is always sent when an update fails.

6. To check for and download updates immediately, click **Download updates**.

7. Click **Apply** to save changes.

Downloading anti-virus updates manually

To check for and download updates for a Virus Scanning Engine, click **Download updates** from the **Updates** tab of the Virus Scanning Engine page.

5.9 Setting the Virus Scanning Engines scan sequence

GFI MailSecurity scans each email through each licensed anti-virus scanning engine. The order of priority and sequence how GFI MailSecurity executes scanning can be configured from the **Virus Scanning Engines** page.

NOTE: The engine with priority 0 has the top priority and is the first engine to scan inbound/outbound emails.

To configure the execution order of the Virus Scanning Engines, follow these steps:

1. Navigate to the **GFI MailSecurity ► Virus Scanning Engines** node.

	Engine	Status	License	Priority		
	AVG Anti-Virus	Gateway scanning: Disabled Information Store Scanning: Enabled	Licensed	0		
	BitDefender Anti-Virus	Gateway scanning: Enabled Information Store Scanning: Enabled	Licensed	1		
	Norman Anti-Virus	Gateway scanning: Enabled Information Store Scanning: Enabled	Licensed	2		
	McAfee Anti-Virus	Gateway scanning: Enabled Information Store Scanning: Enabled	Licensed	3		
	Kaspersky Anti-Virus	Gateway scanning: Enabled Information Store Scanning: Enabled	Licensed	4		
	AVG LinkScanner	Gateway scanning: Enabled	Licensed	5		

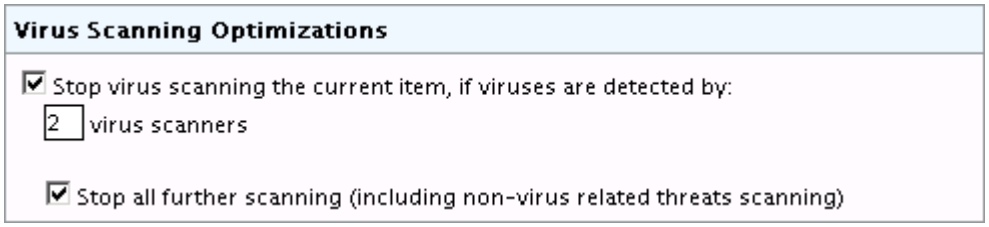
Screenshot 23 - Virus Scanning Engines: scan priority list

2. In the right pane, the Virus Scanning Engines are listed in descending order of priority.

3. To change the virus scanning execution priority, click the (up) or (down) arrows to respectively increase or decrease the priority of the virus scanner.

5.10 Configuring Virus Scanning optimizations

From the **GFI MailSecurity ► Virus Scanning Engines** node you can instruct GFI MailSecurity to stop scanning an item if a particular number of virus scanning engines detect a virus in that item.


Virus Scanning Optimizations
Stop virus scanning the current item, if viruses are detected by:
2
virus scanners
Stop all further scanning (including non-virus related threats scanning)

Screenshot 24 - Configure virus scanning optimizations

To enable this option, select the **Stop virus scanning the current item, if viruses are detected by** check box, and specify the number of virus scanners that need to detect a virus to stop virus scanning, in the box. Click **Apply**.

You can also instruct GFI MailSecurity to stop further scanning by all other modules, such as the Email Exploit Engine. To enable this feature select **Stop scanning even for non-virus related threats** check box and click **Apply**.

5.11 Configuring Information Store Scanning

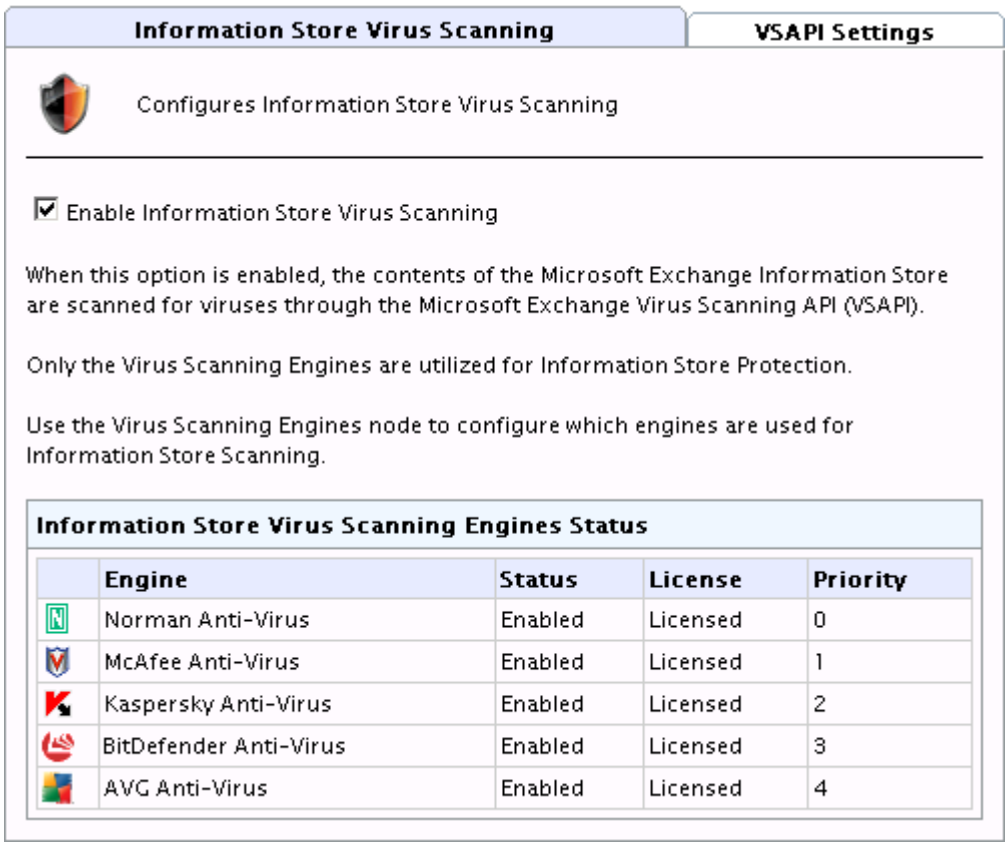
When GFI MailSecurity is installed on the Microsoft Exchange server machine, you can utilize GFI MailSecurity to scan the Microsoft Exchange Information Store for viruses.

NOTE: When GFI MailSecurity is installed on a Microsoft Exchange Server 2007/2010 machine, Information Store Protection is available only when both the Mailbox Server Role and Hub Transport Server Role are installed.

This section will show you how to enable Information Store Scanning and select the scan method used by VSAPI (Virus Scanning API).

5.11.1 Information Store Scanning

1. Click the **GFI MailSecurity ► Virus Scanning Engines ► Information Store Protection** node.



Screenshot 25 - Information Store Protection node

2. In the **Information Store Virus Scanning** tab, check **Enable Information Store Virus Scanning** and click **Apply**.

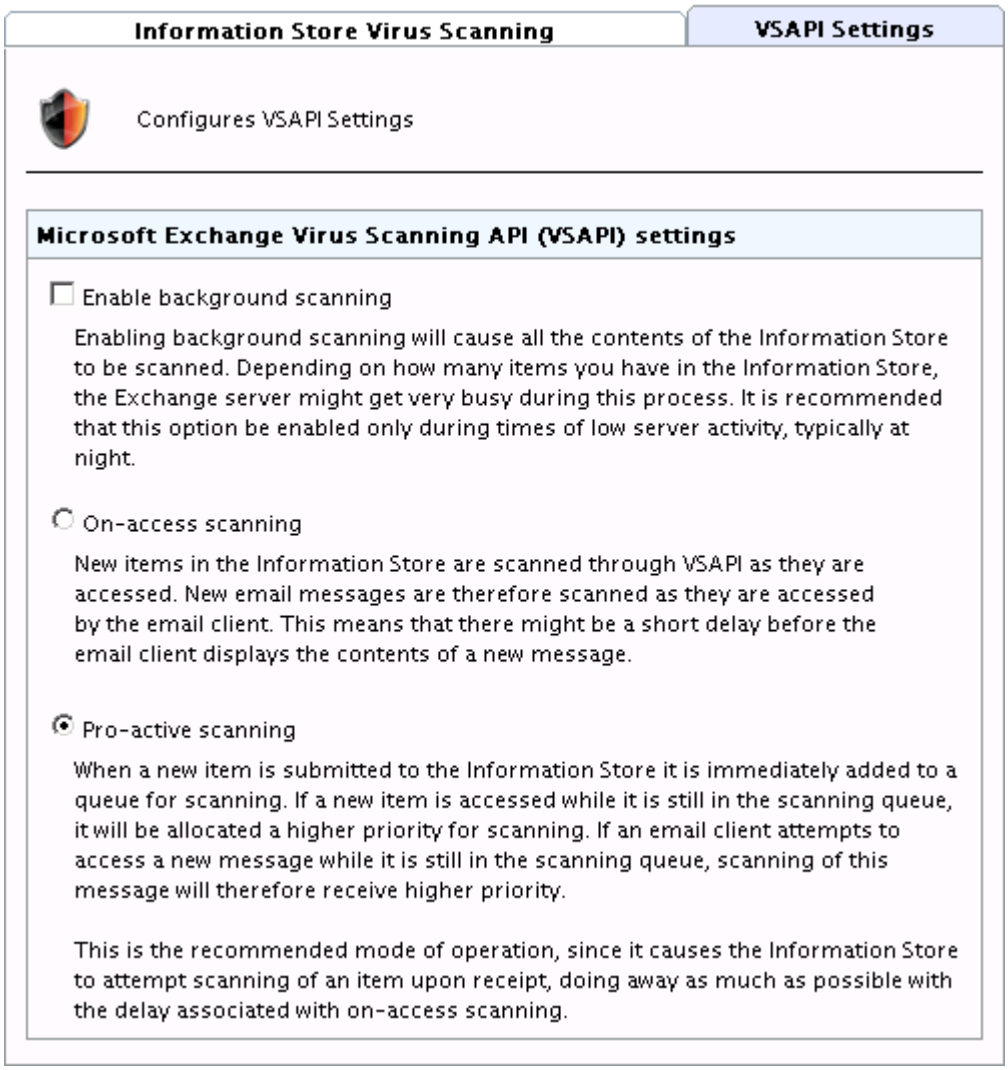
The status of the Virus Scanning Engines used to scan the Information Store is displayed in the table.

You can also disable a particular anti-virus engine from Information Store Scanning. To do this, navigate to the **Virus Scanning Engines** page, select the anti-virus engine and disable **Enable Information Store Virus Scanning (VSAPI)**.

5.11.2 VSAPI settings

The method used by GFI MailSecurity to access emails and attachments in the Microsoft Exchange Information Store is VSAPI (Virus Scanning Application Programming Interface). GFI MailSecurity allows you to specify the method to use when scanning the Information Store.

1. Click the **GFI MailSecurity ► Virus Scanning Engines ► Information Store Protection** node.


Information Store Virus Scanning
VSAPI Settings
Configures VSAPI Settings
Microsoft Exchange Virus Scanning API (VSAPI) settings
Enable background scanning
Enabling background scanning will cause all the contents of the Information Store to be scanned. Depending on how many items you have in the Information Store, the Exchange server might get very busy during this process. It is recommended that this option be enabled only during times of low server activity, typically at night.
On-access scanning
New items in the Information Store are scanned through VSAPI as they are accessed. New email messages are therefore scanned as they are accessed by the email client. This means that there might be a short delay before the email client displays the contents of a new message.
Pro-active scanning
When a new item is submitted to the Information Store it is immediately added to a queue for scanning. If a new item is accessed while it is still in the scanning queue, it will be allocated a higher priority for scanning. If an email client attempts to access a new message while it is still in the scanning queue, scanning of this message will therefore receive higher priority.
This is the recommended mode of operation, since it causes the Information Store to attempt scanning of an item upon receipt, doing away as much as possible with the delay associated with on-access scanning.

Screenshot 26 - VSAPI scan settings

2. Select the **VSAPI Settings** tab.

3. (Optional) Select **Enable background scanning** to run Information Store Scanning in the background.

Background scanning causes all the contents of the Information Store to be scanned. This can result in a high processing load on the Microsoft Exchange server depending on the amount of items stored in the Information Store. It is recommended to enable this option only during periods of low server activity such as during the night.

4. Select a VSAPI scan method:

On-access scanning	New items in the Information Store are scanned as soon as they are accessed by the email client. This introduces a short delay before the email client displays the contents of a new message.
Pro-active scanning	New items added to the Information Store are added to a queue for scanning.

This is the default and recommended mode of operation, since in general the delay associated with on-access scanning is avoided.

NOTE: In the event that an email client tries to access an item that is still in the queue, it will be allocated a higher scanning priority so that it is scanned immediately.

5. Click **Apply**.

6 Configuring other mail filters

Apart from virus scanning engines, GFI MailSecurity also includes a number of other mail filtering mechanisms as described in this chapter.

6.1 Content Filtering

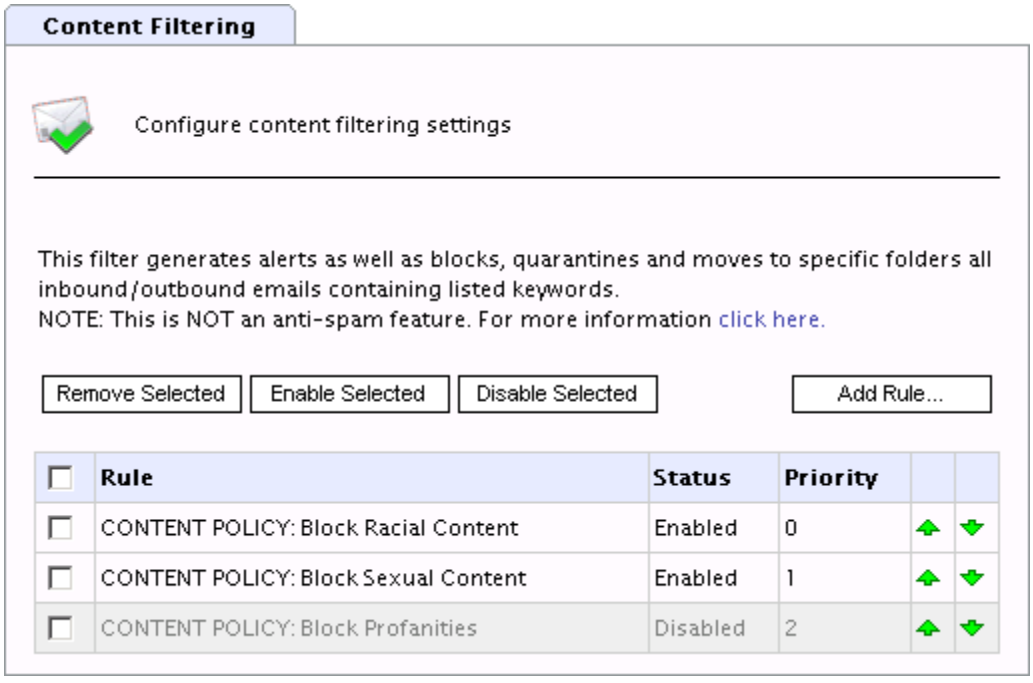
6.1.1 Introduction

The Content Filtering feature allows you to set up rules to filter emails containing particular keywords or a combination of keywords in an email. A rule is composed of:

- Keywords to block in the email body, subject or attachment
- Actions to take when a keyword is found
- The users to which a rule applies.

NOTE: Although this feature can be used as a filter against spam email, it is recommended to use dedicated software to block spam. For more information, refer to:

http://kbase.gfi.com/showarticle.asp?id=KBID003342



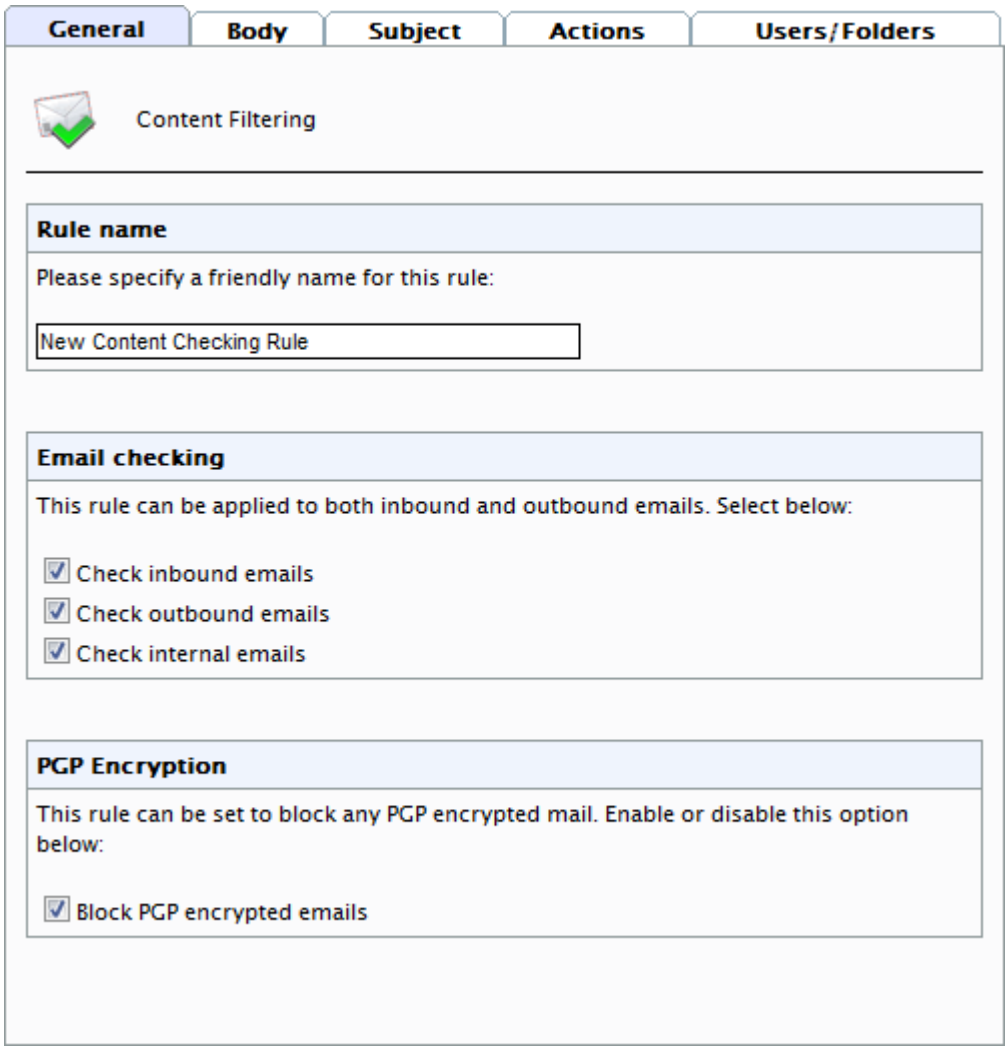
Screenshot 27 - Content Filtering page

To configure content rules, navigate to **GFI MailSecurity ► Scanning & Filtering ► Content Filtering**. This page allows you to view, create, enable, disable or delete rules.

6.1.2 Creating a Content Filtering rule

Step 1: Configuring basic rule settings

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Content Filtering** node and click **Add Rule…**.


General
Body
Subject
Actions
Users/Folders
Content Filtering
Rule name
Please specify a friendly name for this rule:
New Content Checking Rule
Email checking
This rule can be applied to both inbound and outbound emails. Select below:
Check inbound emails
Check outbound emails
Check internal emails
PGP Encryption
This rule can be set to block any PGP encrypted mail. Enable or disable this option below:
Block PGP encrypted emails

Screenshot 28 - Content Filtering: General Tab

2. Specify a name for the rule in the **Rule name** text box.

3. Select which emails to scan.

Check inbound emails	Select this option to scan incoming emails
Check outbound emails	Select this option to scan outgoing emails
Check internal emails	Select this option to scan internal emails. **NOTE:** This option is only available when GFI MailSecurity is installed on the Microsoft Exchange server.

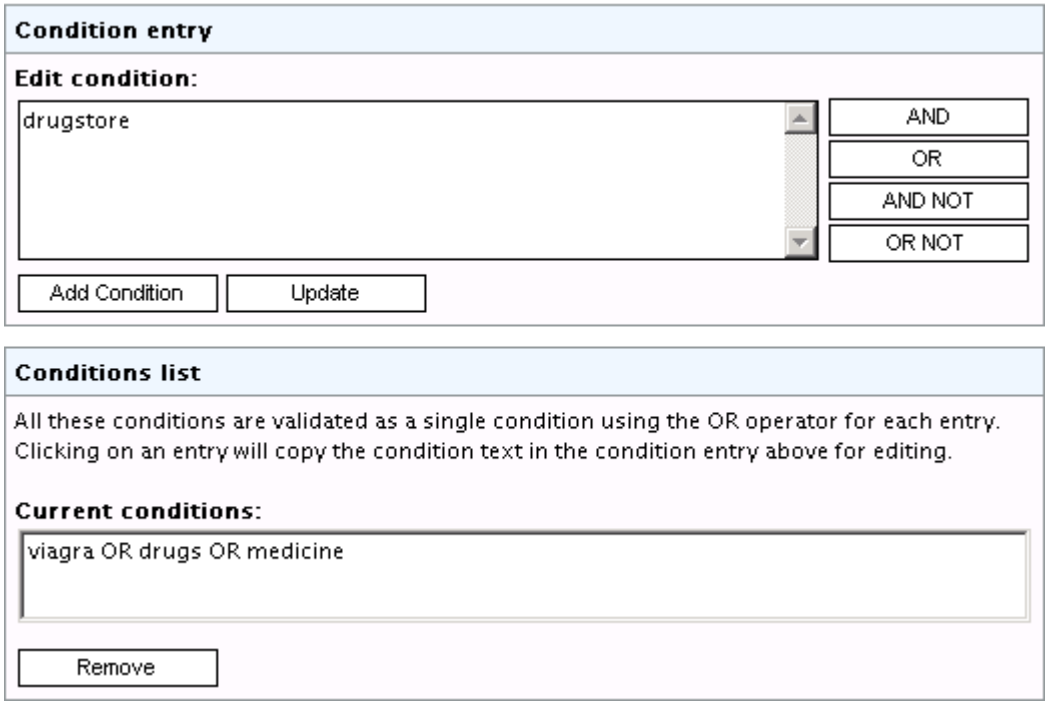
4. To block emails encrypted using PGP technology, select **Block PGP encrypted emails**.

NOTE: PGP encryption is a public-key cryptosystem often used to encrypt emails.

Step 2: Configuring terms to block

1. Select the **Body** tab to specify the keywords in the email body to block.

2. Select **Block emails if content is found matching these conditions** checkbox to enable scanning of body for keywords.



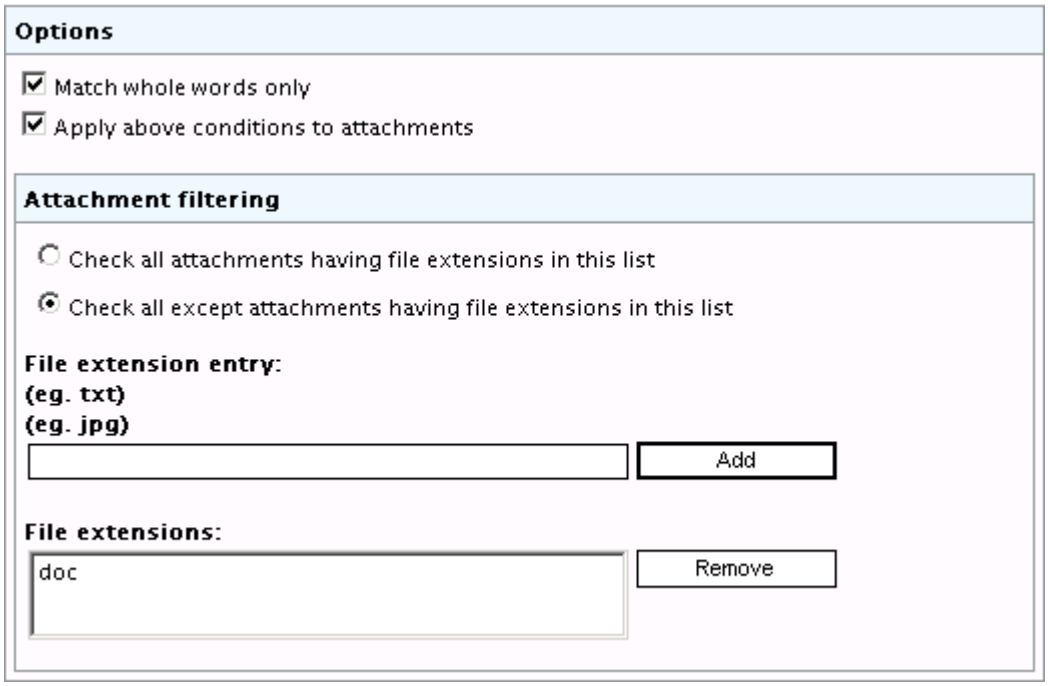
Screenshot 29 - Content Filtering: Body Tab- setting conditions

3. From the **Condition entry** area, key in keywords to block in the **Edit condition** box. You can also use conditions **AND**, **OR**, **AND NOT** and **OR NOT** to use a combinations of keywords.

4. To add the keyword or combination of keywords keyed in, click **Add Condition**.

NOTE 1: To modify an entry in the **Conditions list**, select it and make the required changes in the **Condition entry** box. Click **Update** to apply changes.

NOTE 2: To remove an entry from the **Conditions list**, select it and click **Remove**.

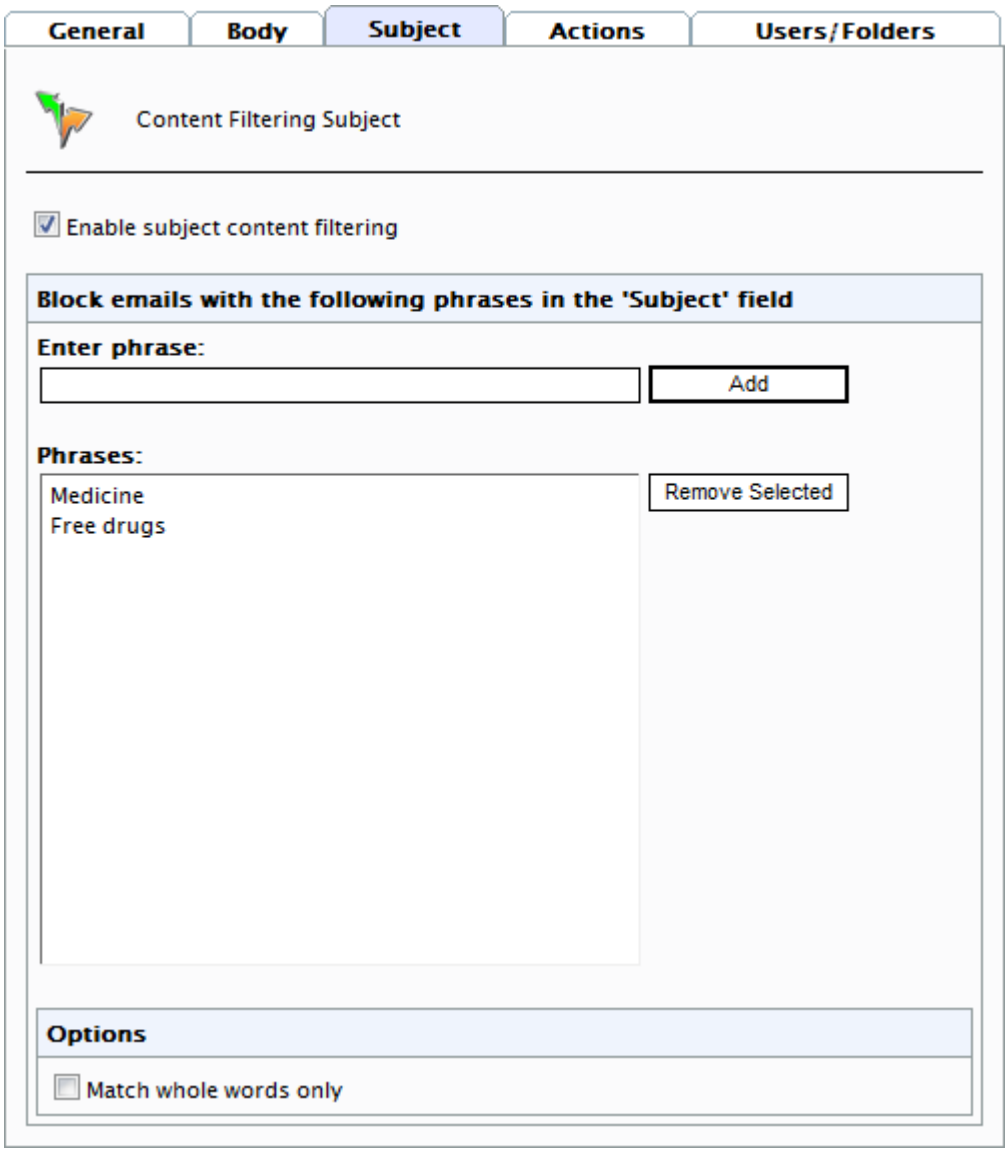


Screenshot 30 - Content Filtering: Body Tab- configuring other options

5. From the **Options** area, configure other settings:

Match whole words only	Block emails when the keywords specified match whole words.
Apply above conditions to attachments	Select this option to apply this rule also to text in attachments. In the **Attachment filtering** area specify the attachments to apply or exclude from this rule.

6. Select the **Subject** tab to specify keywords to block in the email subject.



Screenshot 31 - Content Filtering: Subject Tab

7. Select **Enable subject content filtering** to enable scanning for keywords in the email subject.

8. In the **Enter phrase** text box, specify keywords to block, and click **Add**.

NOTE: To remove an added keyword, select it from the **Phrases** box and click **Remove Selected**.

9. From the **Options** area, configure how keywords are matched. Select **Match whole words only** to block emails where the keywords specified match whole words in the subject.

Step 3: Configuring the actions to take on detected emails

1. Click the **Actions** tab to configure what should be done when this rule is triggered.

2. To block an email that matches the rule conditions, select **Block attachment and perform this action** and select one of the following options:

Quarantine email	Stores emails containing the keyword(s) in the Quarantine Store. You can subsequently review (approve/delete) all the quarantined emails. For more information about Quarantine refer to the Quarantine chapter in this manual.
Delete email	Deletes emails containing the blocked keyword(s).
Move to folder	Moves the email to a folder on disk. Key in the full folder path where to store blocked emails.

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content (e.g. the attachment) with a threat report.

3. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of blocked emails to the recipients but with the malicious content removed.

4. You can configure rule to send email notifications to the administrator and/or user whenever an email containing an attachment is blocked. To do this, from the **Notification options** area select:

Notify administrator	Notify the administrator whenever the rule is triggered. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

5. To log the activity of this rule to a log file, select **Log rule occurrence to this file**. In the text box specify:

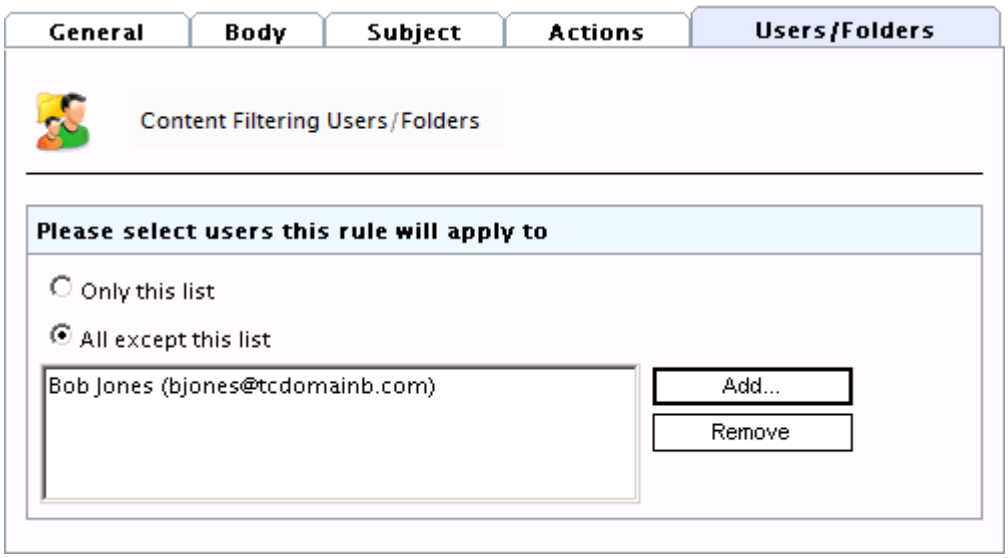
- Path and file name to a custom location on disk where to store the log file, or
- The file name only. The log file will be stored in the following default location:

  <*GFI MailSecurity installation path*>\ContentSecurity\MailSecurity\Logs\<*filename.txt*>

Step 4: Specifying the users to apply this rule to

By default, the rule is applied to all email users. GFI MailSecurity, however, allows you to apply this rule to a custom list of email users.

1. To specify the users to apply this rule to, select **Users/Folders** tab

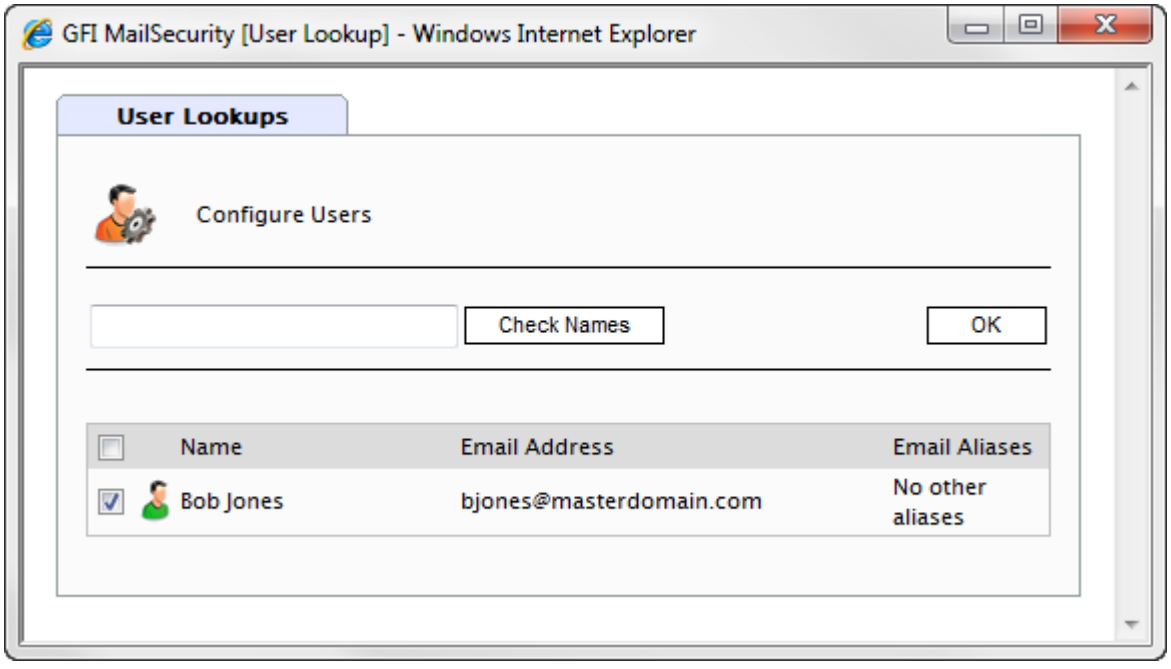


Screenshot 32 - Content Filtering: Users/Folders Tab

2. Specify the users to apply this rule to.

Only this list	Apply this rule to a custom list of email users, groups or public folders.
All except this list	Apply this rule to all email users except for the users, groups or public folders specified in the list.

3. To add email users, user groups and/or public folders to the list, click **Add**.



Screenshot 33 - Add users to a Content Filtering rule

4. In the **User Lookups** window, specify the name of the email user/user group or public folder that you wish to add to the list and click **Check Names**. Matching users, groups or public folders are listed below.

NOTE: You do not need to input the full name of the users, groups or public folder. It is enough to enter part of the name. GFI MailSecurity will list all the names that contain the specified characters. For example, if you input 'sco', GFI MailSecurity will return names like 'Scott Adams' and 'Freeman Prescott', if they are available.

5. Select the check box next to the name(s) that you want to add to the list and click **OK**.

NOTE 1: To remove entries from the list, select the user/user group/public folder you want to remove and click **Remove**.

NOTE 2: If no names are included in the list, GFI MailSecurity automatically applies this rule to all email users.

6. Repeat steps 3 to 5 to add all the required users to the list.

7. Click **Apply** to save the newly created rule.

6.1.3 Enabling/disabling rules

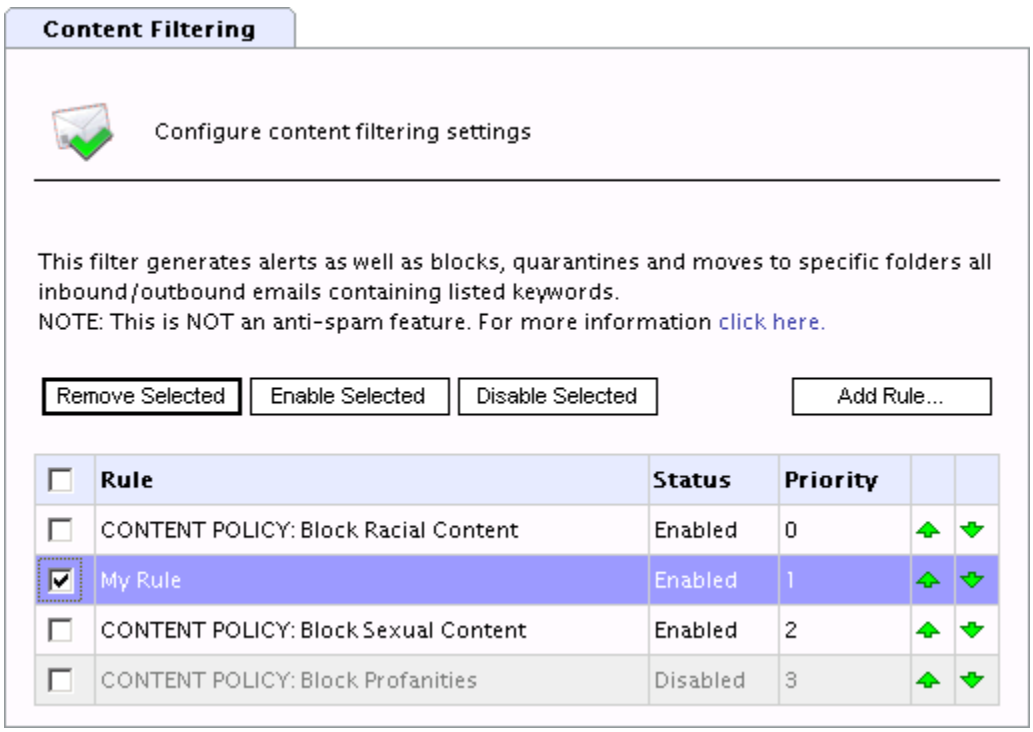
To enable/disable content filtering rules:

1. Navigate to the **GFI MailSecurity ► Scanning & Filtering ► Content Filtering** node.

2. From the Content Filtering page, select the checkbox of the rule(s) to enable or disable.

3. Click **Enable Selected** or **Disable Selected** accordingly.

6.1.4 Removing content filtering rules



Screenshot 34 - Selecting a Content Filtering rule for removal

Deleted rules are not recoverable.

1. Navigate to the **GFI MailSecurity ► Scanning & Filtering ► Content Filtering** node.

2. From the Content Filtering page, select the checkbox of the rule(s) that you want to remove.

3. Click **Remove Selected**.

6.1.5 Modifying an existing rule

1. Click the **GFI MailSecurity ► Scanning & Filtering ► Content Filtering** node.

2. From the Content Filtering page, click the name of the rule to modify.

3. Perform the required changes in the rule properties and click **Apply** to apply changes.

6.1.6 Changing rule priority

Content Filtering rules are applied in the same order, from top to bottom as they are listed in the Content Filtering page (that is, rule with priority value 1 is checked first). To change the sequence/priority of rules:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Content Filtering**.

2. From the Content Filtering page, click the (up) or (down) arrows to respectively increase or decrease the priority of the rule.

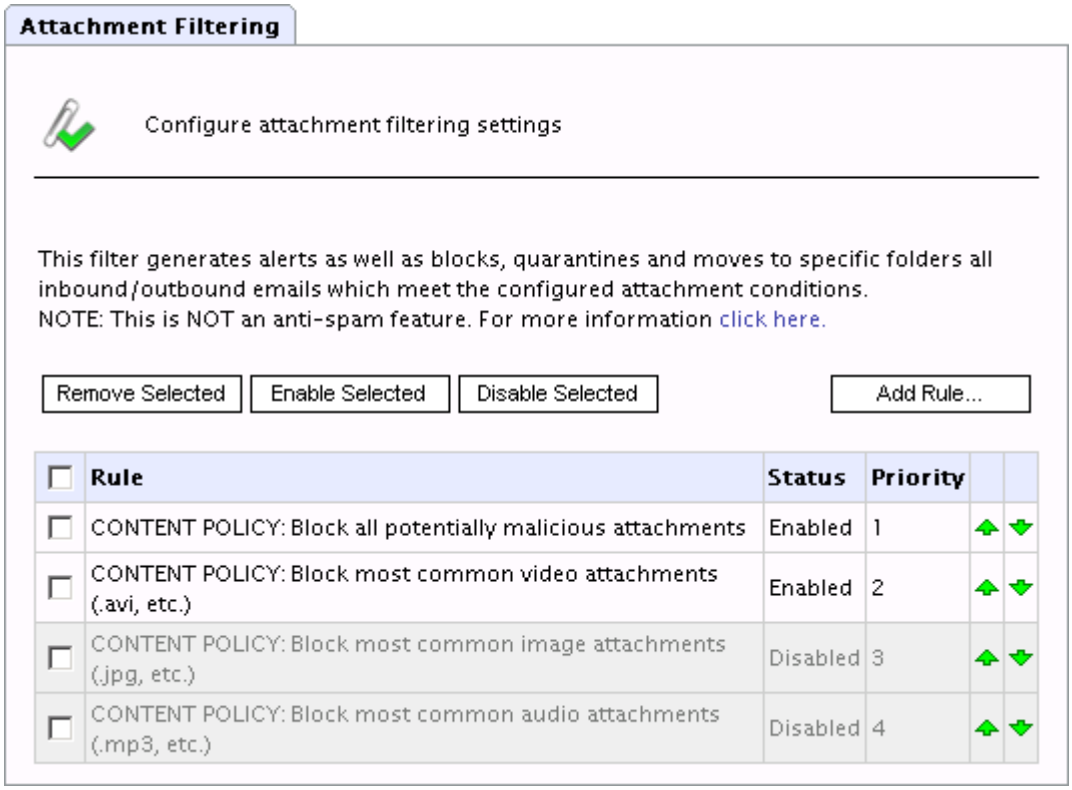
3. Repeat step 2 until rules are placed in the desired sequence.

6.2 Attachment Filtering

6.2.1 Introduction

The Attachment Filtering feature allows you to set up rules to filter what types of email attachments to allow and block on the mail server. A rule is composed of:

- Attachment types to block
- Actions to take when a matching attachment is found
- The users to which a rule applies.

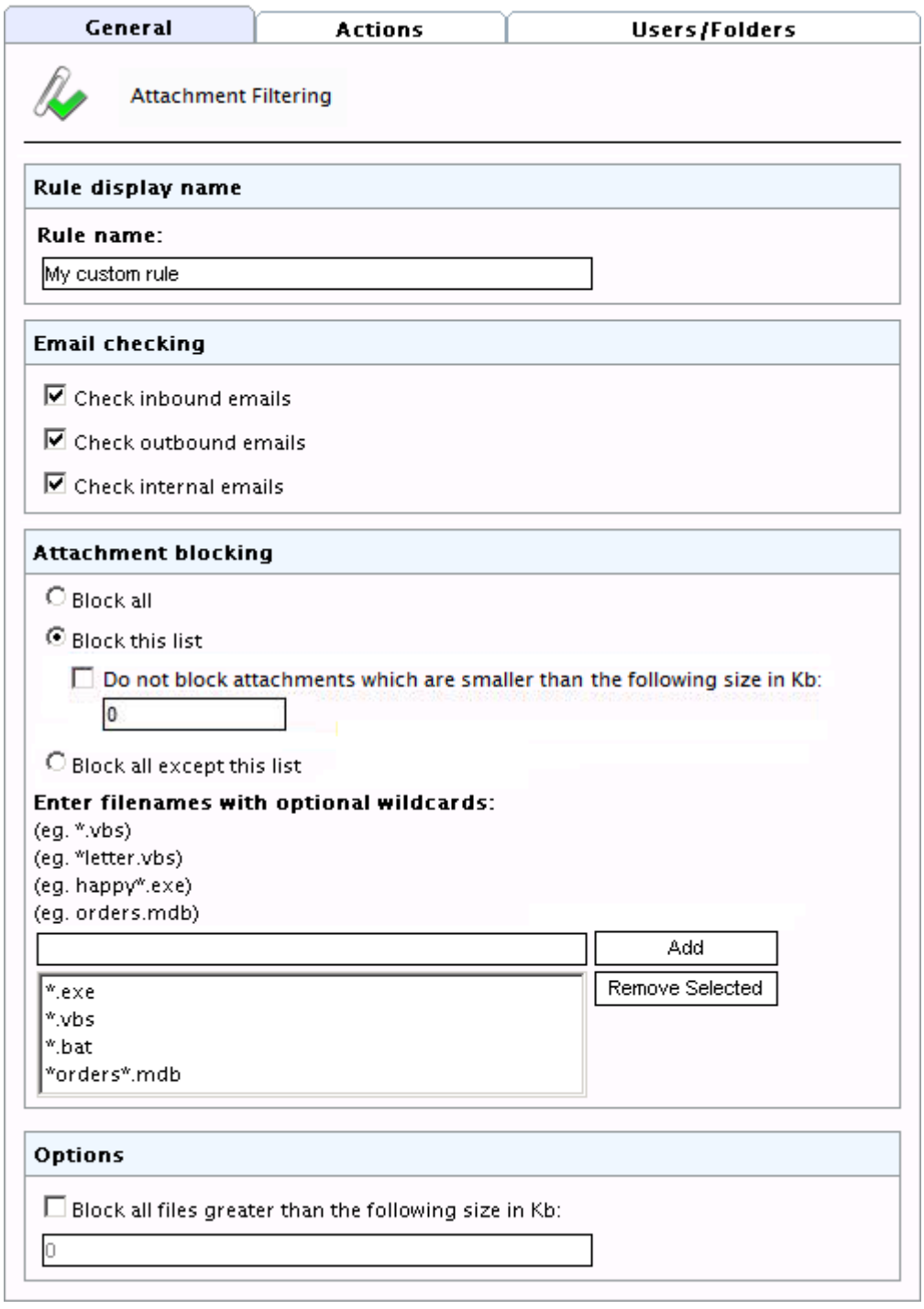

Attachment Filtering
Configure attachment filtering settings
This filter generates alerts as well as blocks, quarantines and moves to specific folders all inbound/outbound emails which meet the configured attachment conditions.
NOTE: This is NOT an anti-spam feature. For more information click here.
Remove Selected
Enable Selected
Disable Selected
Add Rule...
Rule
Status
Priority
CONTENT POLICY: Block all potentially malicious attachments
Enabled
1
CONTENT POLICY: Block most common video attachments (.avi, etc.)
Enabled
2
CONTENT POLICY: Block most common image attachments (.jpg, etc.)
Disabled
3
CONTENT POLICY: Block most common audio attachments (.mp3, etc.)
Disabled
4

Screenshot 35 - Attachment Filtering page

To configure attachment rules, navigate to **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering**. This page allows you to view, create, enable, disable or delete rules.

6.2.2 Creating an Attachment Filtering rule

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering** node.
2. Click **Add Rule…**.



Screenshot 36 - Attachment Filtering: General Tab

3. Specify a name for the rule in the **Rule name** text box.

4. Select whether to scan inbound and/or outbound emails.

Check inbound emails	Select this option to scan incoming emails
Check outbound emails	Select this option to scan outgoing emails
Check internal emails	Select this option to scan internal emails. **NOTE:** This option is only available when GFI MailSecurity is installed on the Microsoft Exchange server

5. In the **Attachment Blocking** area, specify the types of attachments to block:

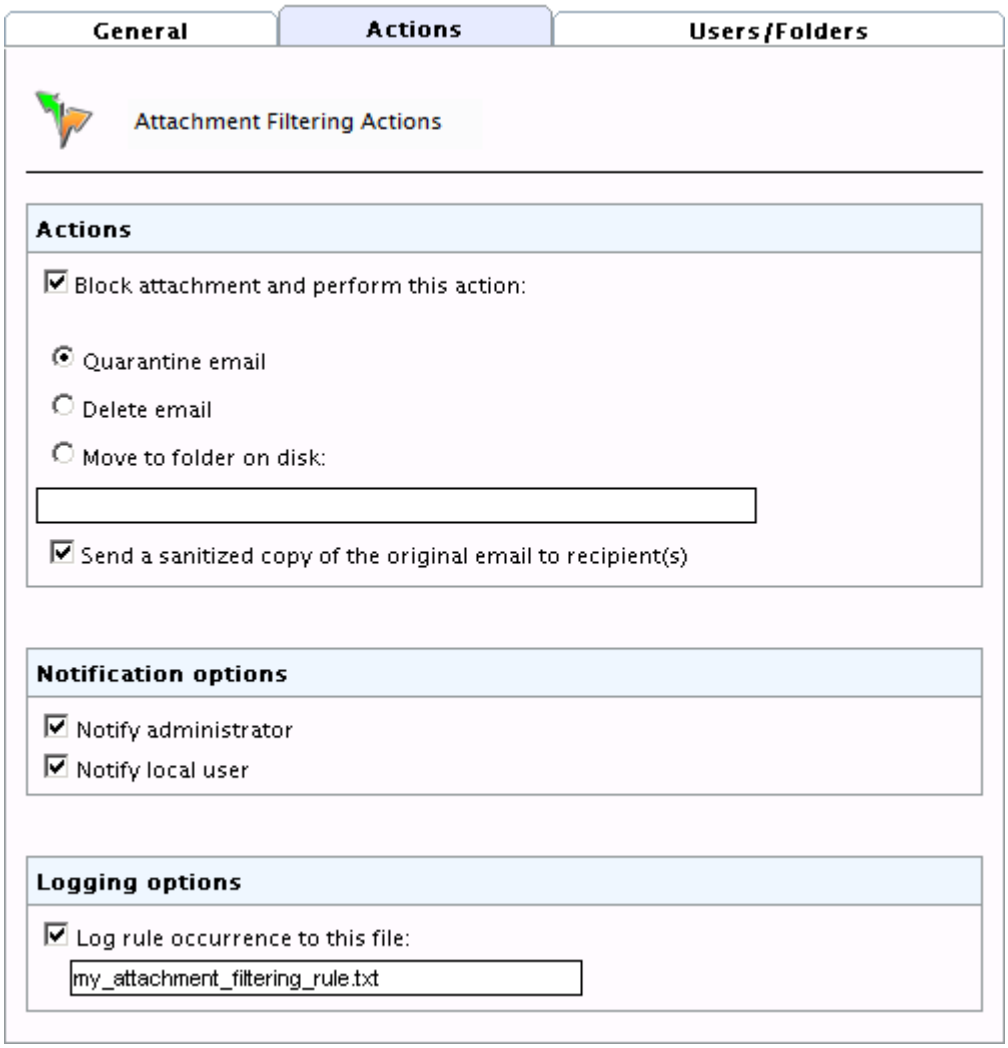
Block all	Block all email attachments of any type.
Block this list	Block a custom list of attachment types. Key in a filename and/or attachment type to block in the **Enter filename with optional wildcards** text box and click **Add**. Repeat this step for all filenames and/or attachment types to block.
Do not block attachments which are smaller than the following size in Kb:	Select this option to allow attachment types in the list that are smaller than a particular size. Specify the size in Kb in the text box provided.
Block all except this list	Block all attachments except the ones specified in the list. Key in a filename and/or attachment type to exclude in the **Enter filename with optional wildcards** text box and click **Add**. Repeat this step for all filenames and/or attachment types to exclude.

NOTE 1: When specifying filenames and/or attachment types, you can use asterisk (*) wildcards. For example, specifying *orders*.mdb refers to all files of type mdb that contain the string 'orders' in the file name. Specifying *.jpg will block all images of type jpg.

NOTE 2: To remove an entry from the list, select it and click **Remove Selected**.

6. You can also block attachments that have a size bigger than a particular size. To enable this option, from the **Options** area select **Block all files greater than the following size in Kb** and specify the maximum attachment size (in Kb).

NOTE: This feature blocks all attachments with a file size bigger than the one specified irrespective if the attachment matches an entry in the Attachment blocking list.



Screenshot 37 - Attachment Filtering: Actions Tab

7. Click the **Actions** tab to configure what happens when this rule is triggered.

8. To block an email that matches the rule conditions from being delivered to recipients, select **Block attachment and perform this action** and select one of the following options:

Quarantine email	Stores emails containing blocked attachments in the Quarantine Store. You can subsequently review (approve/delete) all the quarantined emails. For more information about Quarantine refer to the Quarantine chapter in this manual.
Delete email	Deletes emails containing blocked attachments.
Move to folder	Moves the email to a folder on disk. Key in the full folder path where to store blocked emails.

Actions always affect the whole email containing the blocked attachment, even if there are other attachments that do not trigger this rule.

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content (e.g. the attachment) with a threat report.

9. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

10. You can configure rule to send email notifications to the administrator and/or user whenever an email containing an attachment is blocked. To do this, from the **Notification options** area select:

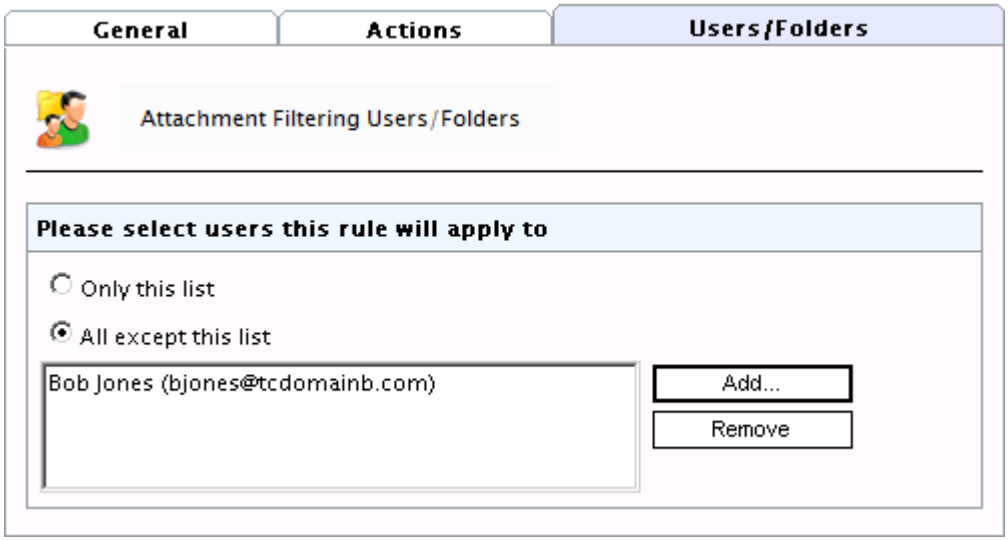
Notify administrator	Notify the administrator whenever the rule is triggered. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

11. To log the activity of this rule to a log file, select **Log rule occurrence to this file** check box. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

12. By default, the rule is applied to all email users. GFI MailSecurity, however, allows you to apply this rule to a custom list of email users. To specify the users to apply this rule to, select **Users/Folders** tab

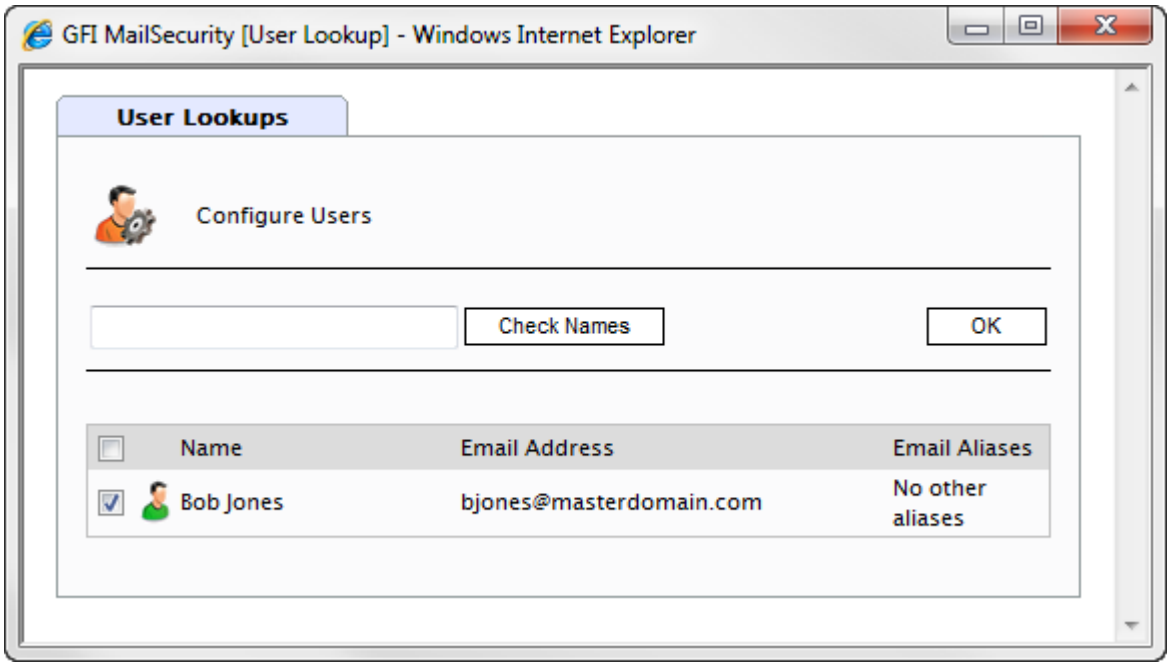


Screenshot 38 - Attachment Filtering: Users/Folders Tab

13. Specify the users to apply this rule to.

Only this list	Apply this rule to a custom list of email users, groups or public folders.
All except this list	Apply this rule to all email users except for the users, groups or public folders specified in the list.

14. To add email users, user groups and/or public folders to the list, click **Add**.



Screenshot 39 - Add users to an attachment Filtering rule

15. In the **User Lookups** window, specify the name of the email user/user group or public folder that you wish to add to the list and click **Check Names**. Matching users, groups or public folders are listed below.

NOTE: You do not need to input the full name of the users, groups or public folder. It is enough to enter part of the name. GFI MailSecurity will list all the names that contain the specified characters. For example, if you input ‘sco’, GFI MailSecurity will return names like ‘Scott Adams’ and ‘Freeman Prescott‘, if they are available.

16. Select the check box next to the name(s) that you want to add to the list and click **OK**.

NOTE 1: To remove entries from the list, select the user/user group/public folder you want to remove and click **Remove**.

NOTE 2: If no names are included in the list, GFI MailSecurity automatically applies this rule to all email users.

17. Repeat steps 14 to 16 to add all the required users to the list.

18. Click **Apply**.

6.2.3 Enabling/disabling rules

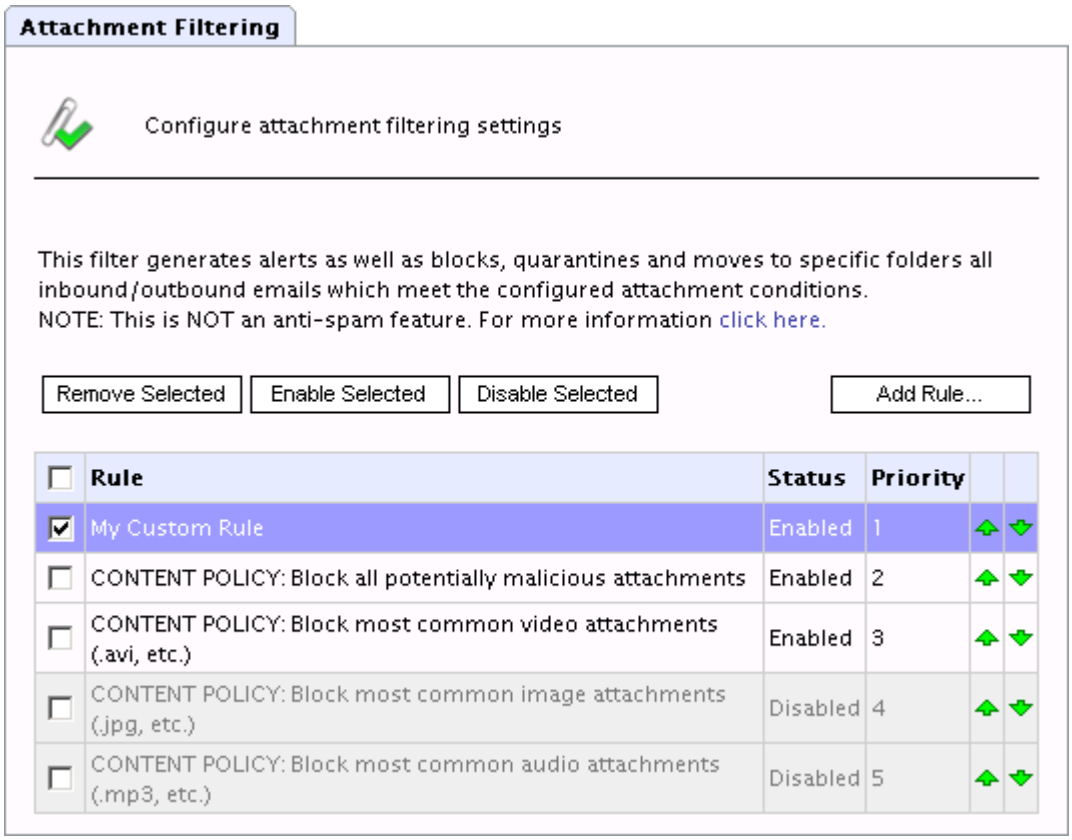
To enable or disable attachment filtering rules:

1. Navigate to the **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering** node.

2. From the Attachment Filtering page, select the checkbox of the rule(s) to enable or disable.

3. Click **Enable Selected** or **Disable Selected** accordingly.

6.2.4 Removing attachment rules



Screenshot 40 - Selecting an attachment Filtering rule for removal

Deleted rules are not recoverable.

1. Navigate to the **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering** node.

2. From the Attachment Filtering page, select the checkbox of the rule(s) that you want to remove.

3. Click **Remove Selected** to delete the selected rules.

6.2.5 Modifying an existing rule

1. Click the **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering** node.

2. From the Attachment Filtering page, click the name of the rule to modify.

3. Perform the required changes in the rule properties and click **Apply** to apply changes.

6.2.6 Changing the rule priority

Attachment Filtering rules are applied in the same order, from top to bottom as they are listed in the Attachment Filtering page (that is, rule with priority value 1 is checked first). To change the sequence/priority of rules:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Attachment Filtering**.

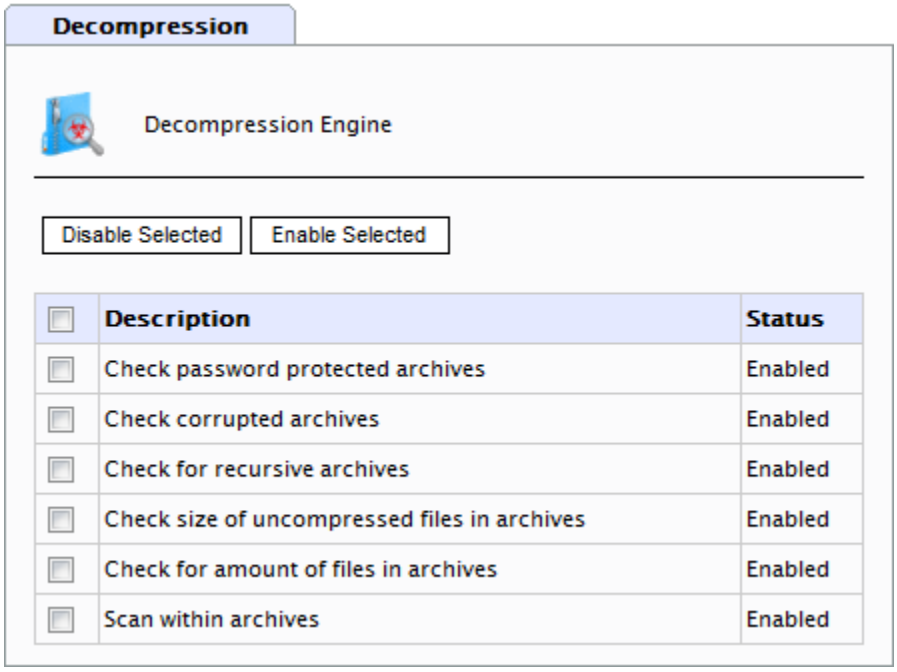
2. From the Attachment Filtering page, click the (up) or (down) arrows to respectively increase or decrease the priority of the rule.

3. Repeat step 2 until rules are placed in the desired sequence.

6.3 Decompression engine

6.3.1 Introduction

The Decompression engine decompresses and analyzes archives attached to an email.



Screenshot 41 - The decompression engine filters list

The following is a list of checks performed by the decompression engine:

- Password protected archives
- Corrupted archives
- Recursive archives
- Size of decompressed files in archives
- Amount of files in archives
- Scan within archives

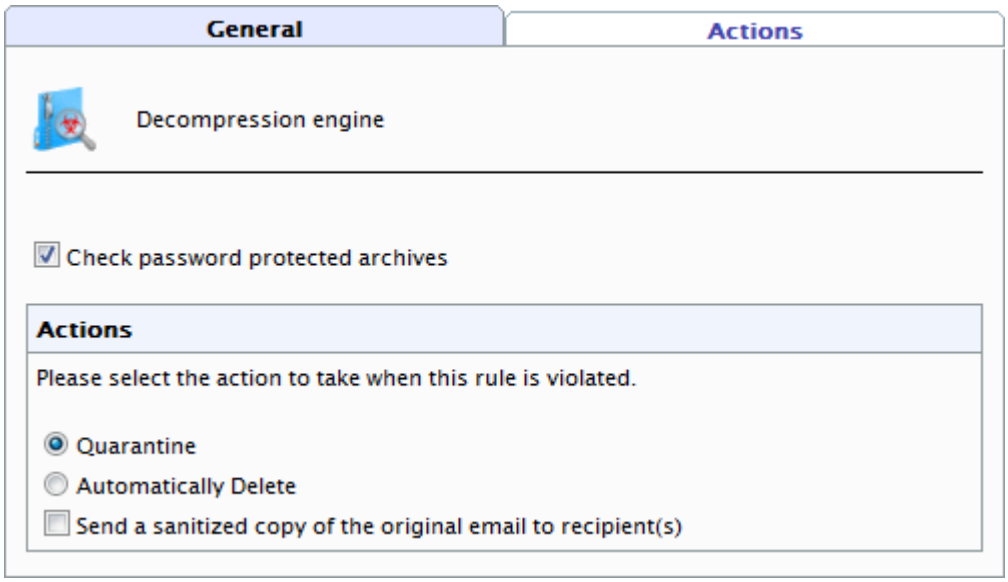
6.3.2 Configuring the decompression engine filters

To configure any decompression engine filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. Click the decompression filter to configure.

Check password protected archives



Screenshot 42 - Configuring password protected archives options

This filter allows you to quarantine or delete emails that contain password-protected archives. To configure this filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the list of available filters, click **Check password protected archives**.

3. To enable this filter select the **Check password protected archives** checkbox.

4. Specify what to do when an email contains an archive that triggers this filter:

Quarantine	Quarantines blocked emails
Automatically Delete	Deletes blocked emails

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content with a threat report.

5. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

6. Click the **Actions** tab to configure further actions.

7. GFI MailSecurity can send email notifications whenever an email triggers this filter. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

8. To log the occurrence of this activity to a log file select the **Log occurrence to this file** check box. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

9. Click **Apply**.

Check corrupted archives

This filter allows you to quarantine or delete emails that contain corrupted archives. To configure this filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the list of available filters, click **Check corrupted archives**.

3. To enable this filter select the **Check corrupted archives** checkbox.

4. Specify what to do when an email contains an archive that triggers this filter:

Quarantine	Quarantines blocked emails
Automatically Delete	Deletes blocked emails

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content with a threat report.

5. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

6. Click the **Actions** tab to configure further actions.

7. GFI MailSecurity can send email notifications whenever an email triggers this filter. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

8. To log the occurrence of this activity to a log file select the **Log occurrence to this file** check box. In the text box specify:

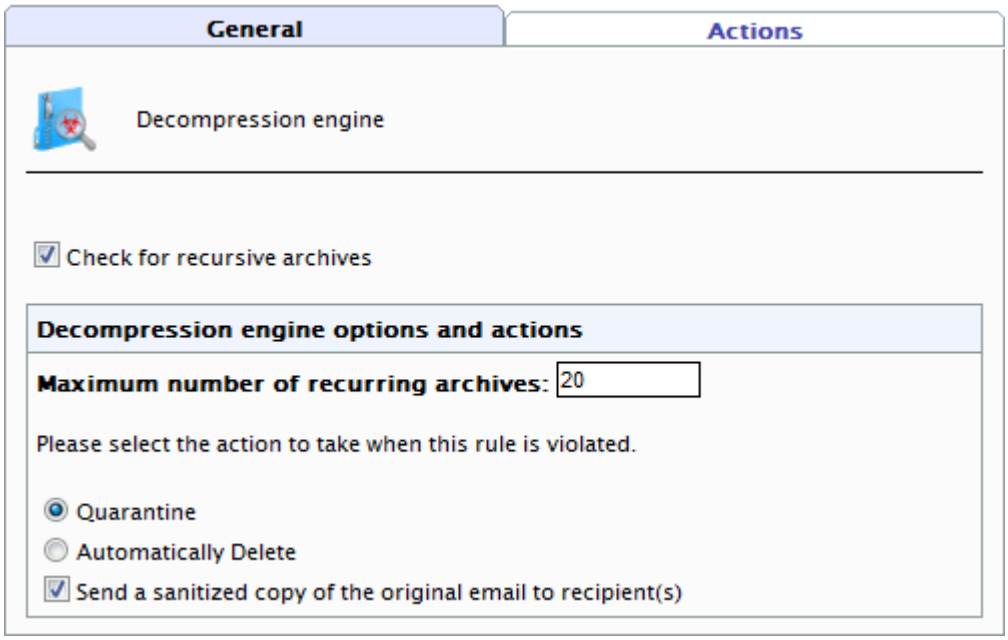
- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or

- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

9. Click **Apply**.

Check for recursive archives


General
Actions
Decompression engine
Check for recursive archives
Decompression engine options and actions
Maximum number of recurring archives: 20
Please select the action to take when this rule is violated.
Quarantine
Automatically Delete
Send a sanitized copy of the original email to recipient(s)

Screenshot 43 - Configuring recursive archives options

This filter allows you to quarantine or delete emails that contain recursive archives. Recursive archives, also known as nested archives, are archives that contain other/multiple levels of sub-archives (that is, archives within archives). A high number of archive levels can indicate a malicious archive. Recursive archives can be used in a DoS (Denial of Service) attack, since most content scanning and anti-virus packages crash while attempting to scan nested archive levels. To configure this filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the list of available filters, click **Check for recursive archives**.

3. To enable this filter select the **Check for recursive archives** checkbox.

4. Specify the maximum number of recurring archives in the **Maximum number of recurring archives** text box. If an archive contains more recurring archives than the specified number, the email is triggered as malicious.

5. Specify what to do when an email contains an archive that triggers this filter:

Quarantine	Quarantines blocked emails
Automatically Delete	Deletes blocked emails

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content with a threat report.

3. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

7. Click the **Actions** tab to configure further actions.

8. GFI MailSecurity can send email notifications whenever an email triggers this filter. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

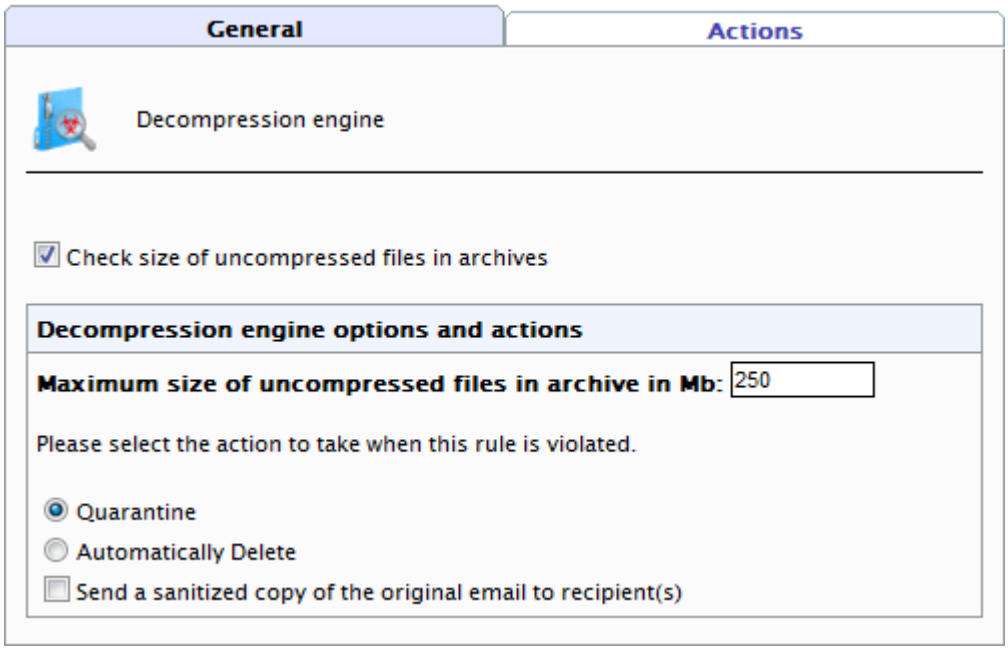
9. To log the occurrence of this activity to a log file select the **Log occurrence to this file** check box. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

10. Click **Apply**.

Check size of uncompressed files in archives


General
Actions
Decompression engine
Check size of uncompressed files in archives
Decompression engine options and actions
Maximum size of uncompressed files in archive in Mb: 250
Please select the action to take when this rule is violated.
Quarantine
Automatically Delete
Send a sanitized copy of the original email to recipient(s)

Screenshot 44 - Configuring checks for the size of uncompressed files in archives

This filter allows you to block or delete emails with archives that exceed the specified physical size when uncompressed. Hackers sometimes use this method in a DoS (Denial of Service) attack by sending an archive that can be uncompressed to a very large file that crashes content security or anti-virus software. To configure this filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the list of available filters, click **Check size of uncompressed files in archives**.

3. To enable this filter select the **Check size of uncompressed files in archives** checkbox.

4. Specify the maximum size of uncompressed archives in the **Maximum size of uncompressed files in archive in Mb** text box. If an uncompressed archive's size is bigger than the specified value, the email is triggered as malicious.

5. Specify what to do when an email contains an archive that triggers this filter:

Quarantine	Quarantines blocked emails
Automatically Delete	Deletes blocked emails

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content with a threat report.

6. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

7. Click the **Actions** tab to configure further actions.

8. GFI MailSecurity can send email notifications whenever an email triggers this filter. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

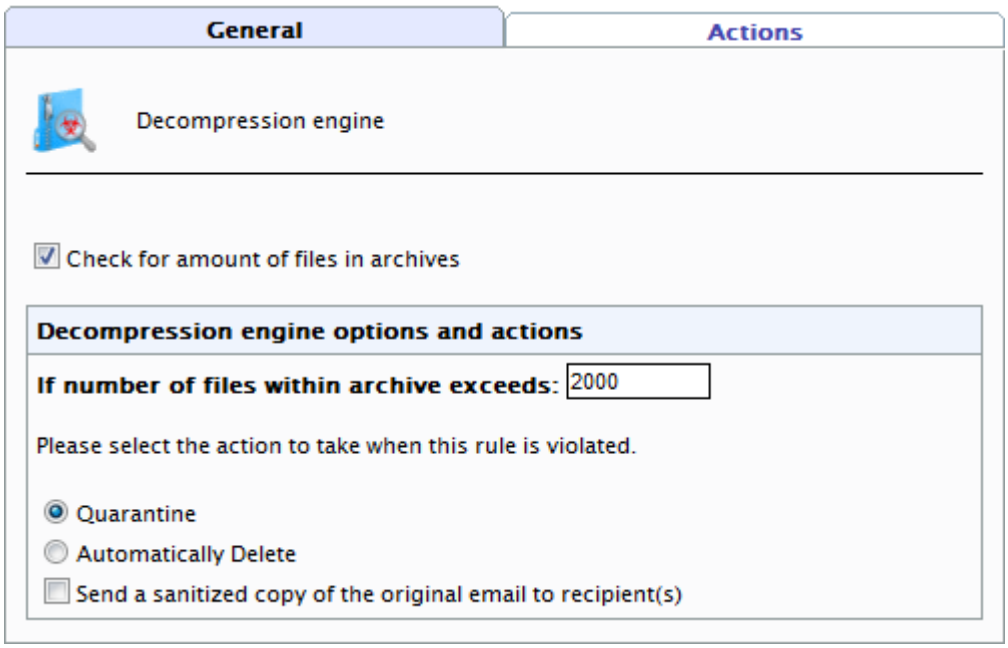
9. To log the occurrence of this activity to a log file select the **Log occurrence to this file** check box. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

10. Click **Apply**.

Check for amount of files in archives


General
Actions
Decompression engine
Check for amount of files in archives
Decompression engine options and actions
If number of files within archive exceeds: 2000
Please select the action to take when this rule is violated.
Quarantine
Automatically Delete
Send a sanitized copy of the original email to recipient(s)

Screenshot 45 - Configuring the amount of files in archive check

This filter allows you to quarantine or delete emails that contain an excessive amount of compressed files within an attached archive. You can specify the number of files allowed in archive attachments from the configuration options included in this filter. To configure this filter:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the list of available filters, click **Check for amount of files in archives**.

3. To enable this filter select the **Check for amount of files in archives** checkbox.

4. Specify the maximum number of files in archives in the **If the number of files within archive exceeds** text box. If the archive contains more files than the specified value, the email is triggered as malicious.

5. Specify what to do when an email contains an archive that triggers this filter:

Quarantine	Quarantines blocked emails
Automatically Delete	Deletes blocked emails

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content with a threat report.

6. Select **Send a sanitized copy of the original email to recipient(s)** to choose whether to forward a copy of the blocked email to the recipients but with the malicious content removed.

7. Click the **Actions** tab to configure further actions.

8. GFI MailSecurity can send email notifications whenever an email triggers this filter. To enable this feature, select any of the following options:

Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email

	address.
Notify local user	Notify the email local recipients about the blocked email.

9. To log the occurrence of this activity to a log file select the **Log occurrence to this file** check box. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <*GFI MailSecurity installation path*>\ContentSecurity\MailSecurity\Logs\<*filename*>.*txt*

10. Click **Apply**.

Scan within archives (attachment checking)

Through the **Scan within archives** option, you can apply Attachment Filtering and Content Filtering of files within archives.

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

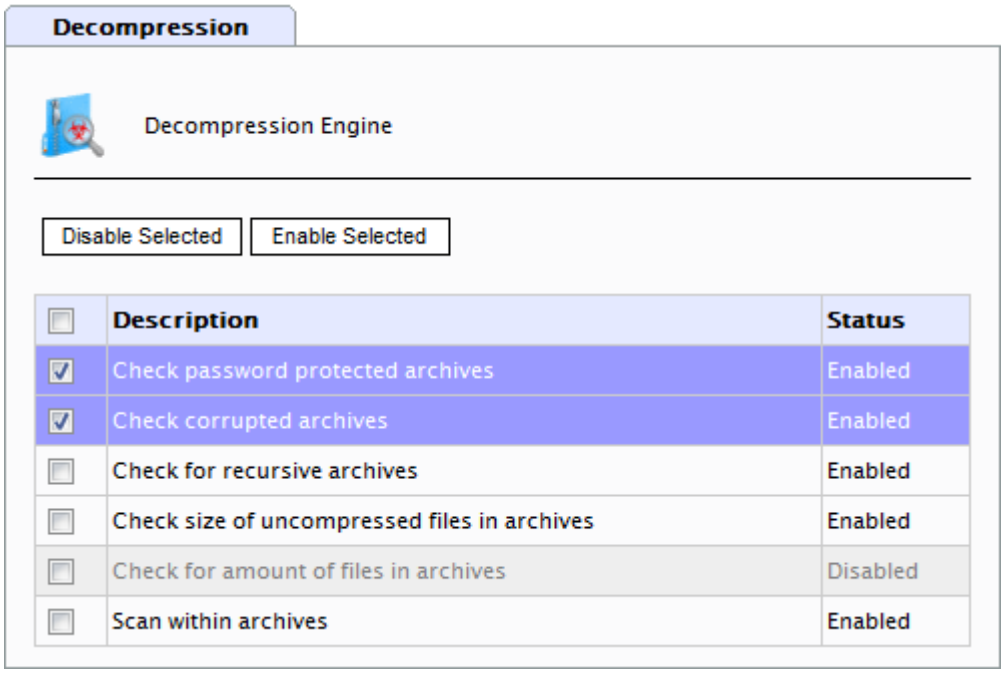
2. From the list of available filters, click **Scan within archives**.

3. To enable scanning within archives select the **Apply Attachment and Content Filtering rules within archives** checkbox.

4. Click **Apply**.

For more information about Attachment Filtering and Content Filtering refer to Attachment Filtering and Content Filtering sections respectively in this manual.

6.3.3 Enable/disable decompression filters



Screenshot 46 -Disabling Decompression tool filters

To enable or disable decompression filters:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Decompression**.

2. From the Decompression engine page, select the checkbox of the filters to enable or disable.

3. Click **Enable Selected** or **Disable Selected** accordingly.

6.4 The Trojan & Executable Scanner

6.4.1 Introduction

GFI MailSecurity includes an advanced Trojan and Executable Scanner that analyzes and determines the function of an executable file. This scanner can subsequently quarantine any executables that perform suspicious activities (such as Trojans).

What is a Trojan horse?

In computer technology, a Trojan horse is a covert attack vector that compromises a victim's computer while remaining undetected. This enables the attacker access to the data stored on that computer. Subsequently, the attacker can compromise the data and can cause downtime and loss of data to the victim. Hackers typically hide Trojans in applications that appear to perform a legitimate function.

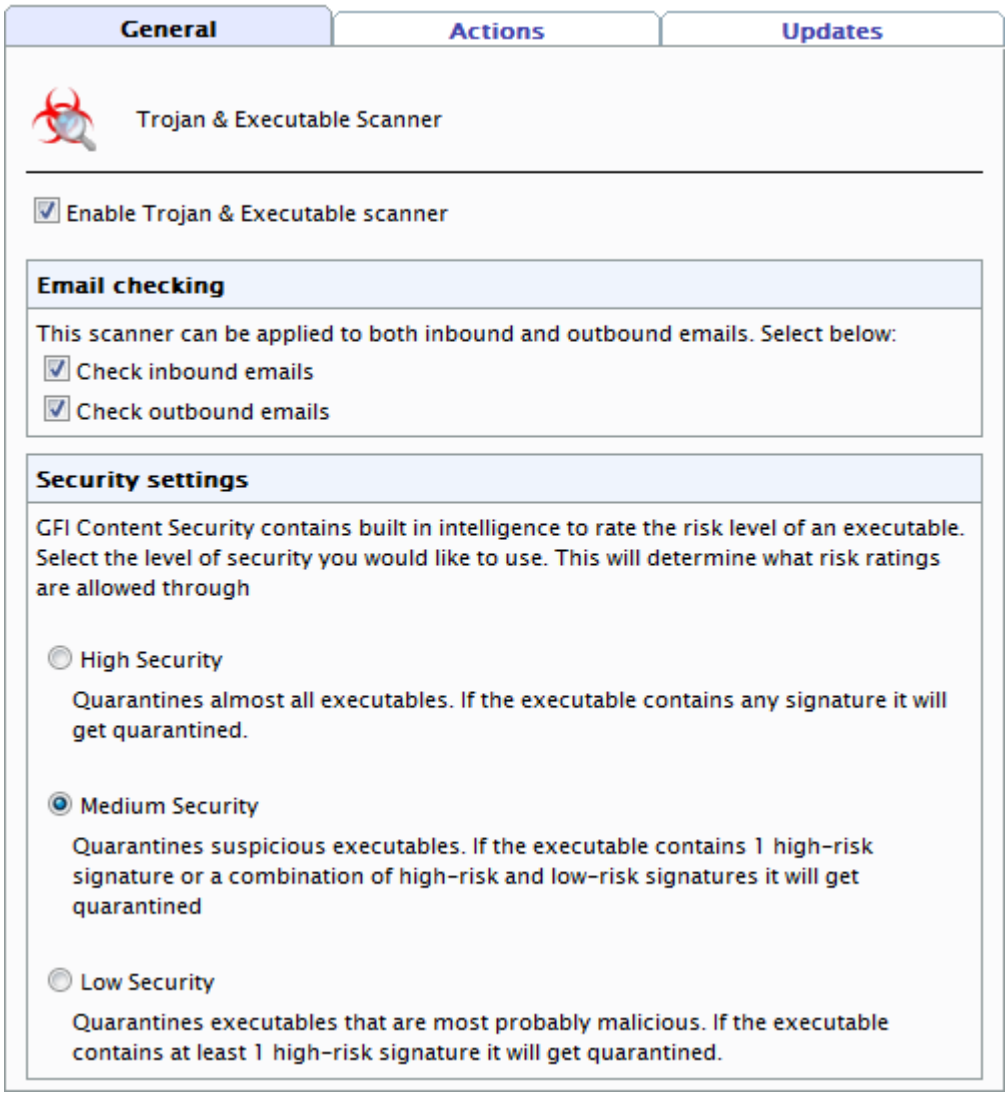
How does the Trojan & Executable Scanner work?

GFI MailSecurity rates the risk-level of an executable file by decompiling the executable, and detecting in real-time what the executable might do. Subsequently, it compares capabilities

of the executable to a database of malicious actions and rates the risk level of the file. With the Trojan & Executable scanner, you can detect and block potentially dangerous, unknown or one-off Trojans before they compromise your network.

6.4.2 Configuring the Trojan & Executable Scanner

This section describes how to customize the GFI MailSecurity Trojan & Executable Scanner.


General
Actions
Updates
Trojan & Executable Scanner
Enable Trojan & Executable scanner
Email checking
This scanner can be applied to both inbound and outbound emails. Select below:
Check inbound emails
Check outbound emails
Security settings
GFI Content Security contains built in intelligence to rate the risk level of an executable. Select the level of security you would like to use. This will determine what risk ratings are allowed through
High Security
Quarantines almost all executables. If the executable contains any signature it will get quarantined.
Medium Security
Quarantines suspicious executables. If the executable contains 1 high-risk signature or a combination of high-risk and low-risk signatures it will get quarantined
Low Security
Quarantines executables that are most probably malicious. If the executable contains at least 1 high-risk signature it will get quarantined.

Screenshot 47 - Trojan and Executable Scanner: General Tab

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Trojan & Executable Scanner**.

2. Select **Enable Trojan & Executable Scanner** to activate this filter.

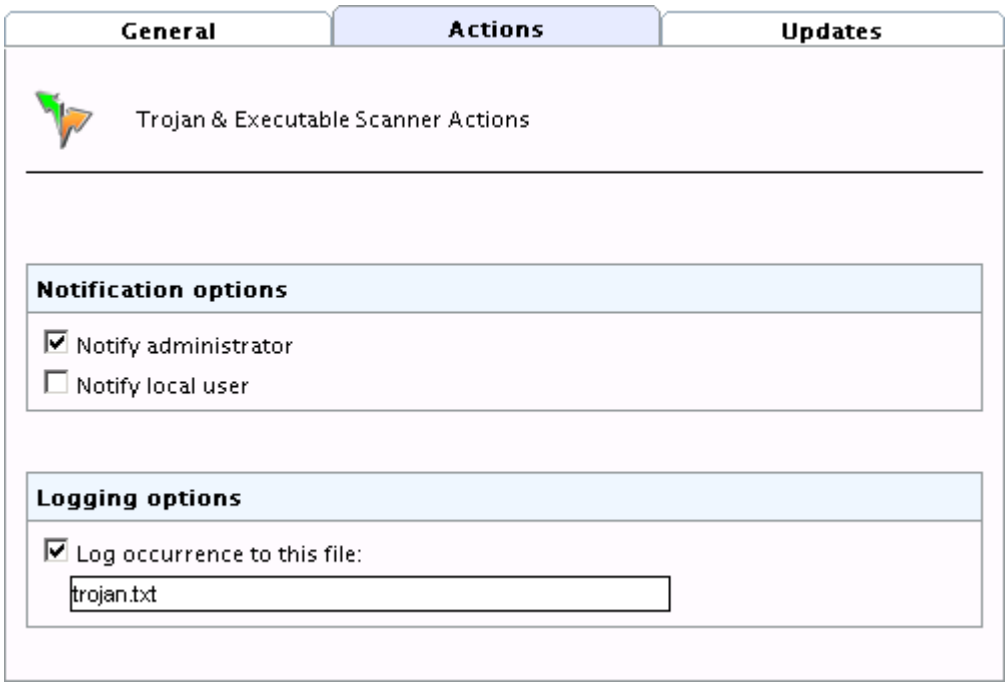
3. In **Email checking** area, specify the emails to check for Trojans and other malicious executables by selecting:

Check inbound emails	Scan incoming emails for Trojans and malicious executable files.

Check outbound emails	scan outgoing emails for Trojans and malicious executable files.

4. From the **Security settings** area, choose the required level of security:

High Security	Blocks all executables that contain any known malicious signatures
Medium Security	Blocks suspicious executables. Emails are blocked if an executable contains one high-risk signature or a combination of high-risk and low-risk signatures.
Low Security	Blocks only malicious executables. Emails are blocked if an executable contains at least one high-risk signature.



Screenshot 48 - Trojan and Executables Scanner: Actions Tab

5. Click the **Actions** tab to configure the actions you want GFI MailSecurity to take on emails containing a malicious executable.

NOTE 1: Emails blocked by the Trojan & Executable Scanner are always quarantined.

NOTE 2: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content (e.g. the attachment) with a threat report.

6. GFI MailSecurity can send email notifications whenever malicious executables are detected. To enable this feature, select any of the following options:

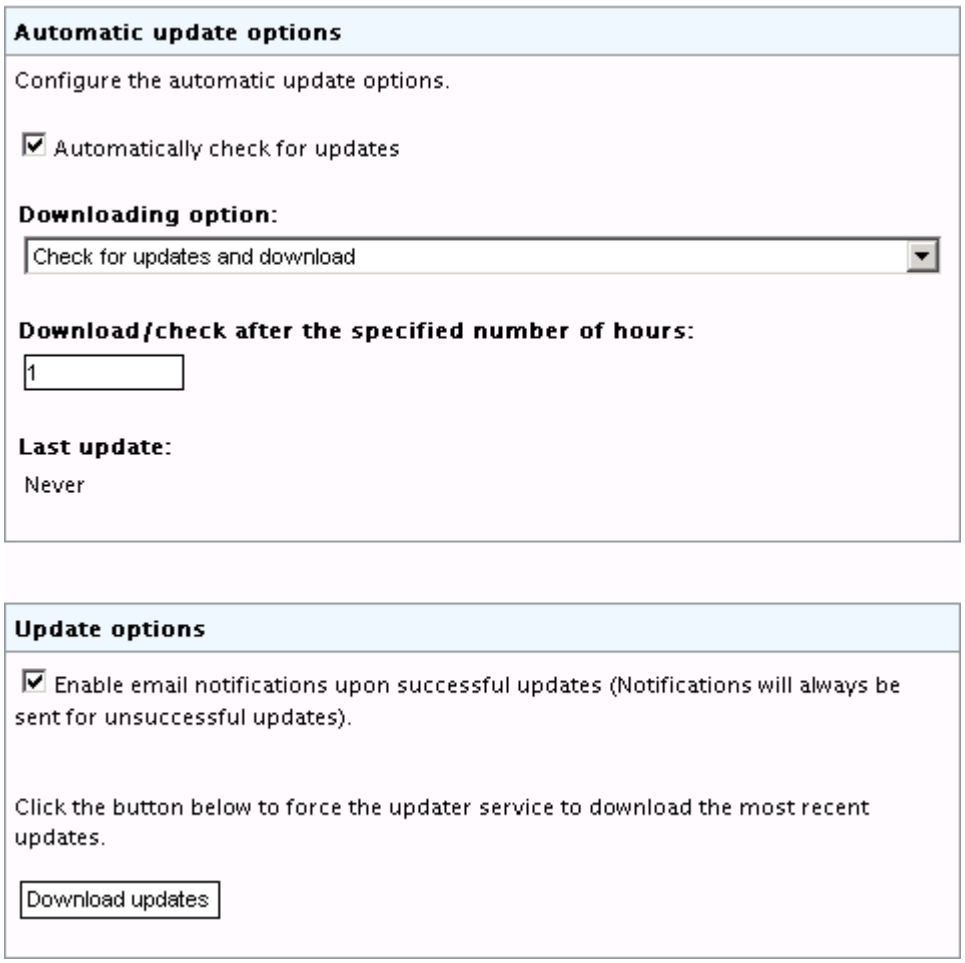
Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

7. To log the occurrence of this activity to a log file select **Log occurrence to this file** checkbox. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

8. Select **Updates** tab to configure GFI MailSecurity to download Trojan & Executable Scanner updates automatically or to notify the administrator whenever new updates are available.


Automatic update options
Configure the automatic update options.
Automatically check for updates
Downloading option:
Check for updates and download
Download/check after the specified number of hours:
1
Last update:
Never
Update options
Enable email notifications upon successful updates (Notifications will always be sent for unsuccessful updates).
Click the button below to force the updater service to download the most recent updates.
Download updates

Screenshot 49 - Trojan and Executable Scanner: Updates tab

9. To enable the automatic updating of Trojan & Executable Scanner, select **Automatically check for updates** check box.

10. From the **Downloading options** list, select one of the following download options:

Only check for updates	Automatically check for updates and notify the administrator whenever updates are available. This option will NOT download the available updates automatically.
Check for updates and download	Automatically check for and download all available updates.

11. In **Download/check after the specified number of hours** text box, specify how often you want GFI MailSecurity to check for updates, by typing an hourly interval.

12. In the **Update options** area, select **Enable email notifications upon successful updates** to send an email notification to the administrator whenever Trojan & Executable Scanner is updated successfully.

NOTE: An email notification is always sent when an update fails.

13. To check for and download updates immediately, click **Download updates**.

14. Click **Apply**.

6.5 The Email Exploit Engine

6.5.1 Introduction

What is an exploit?

An exploit uses known vulnerabilities in applications or operating systems to compromise the security of a system. It "exploits" a feature of a program or the operating system for its own use. For example, execute a program or command, or install a backdoor.

What is an e-mail exploit?

An email exploit is an exploit launched via email. An email exploit is essentially an exploit that can be embedded in an email, and executed on the recipient's machine either when the user receives or opens the email.

Difference between Anti-Virus software & Email Exploit Detection software

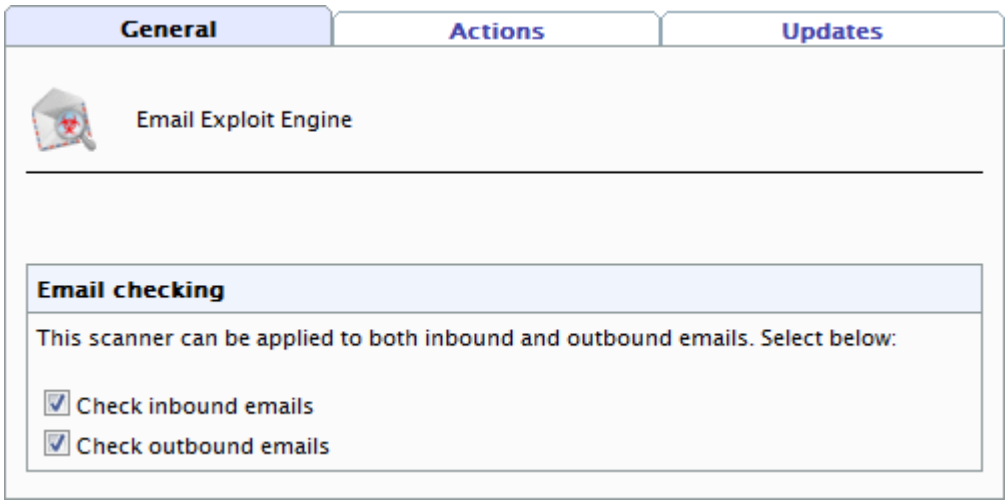
Anti-virus software is designed to detect malicious code. It does not necessarily analyze the method used to execute the code, whereas the Email Exploit Detection Engine scans for methods that execute a program or command on the user's system.

The Email Exploit Engine does not check whether the program is malicious or not. Rather, it assumes a security risk if an email is using an exploit in order to run a program or command, whether or not the actual program or command is malicious.

6.5.2 Configuring the Email Exploit Engine

To configure the **Email Exploit Engine** properties:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Email Exploit Engine**.



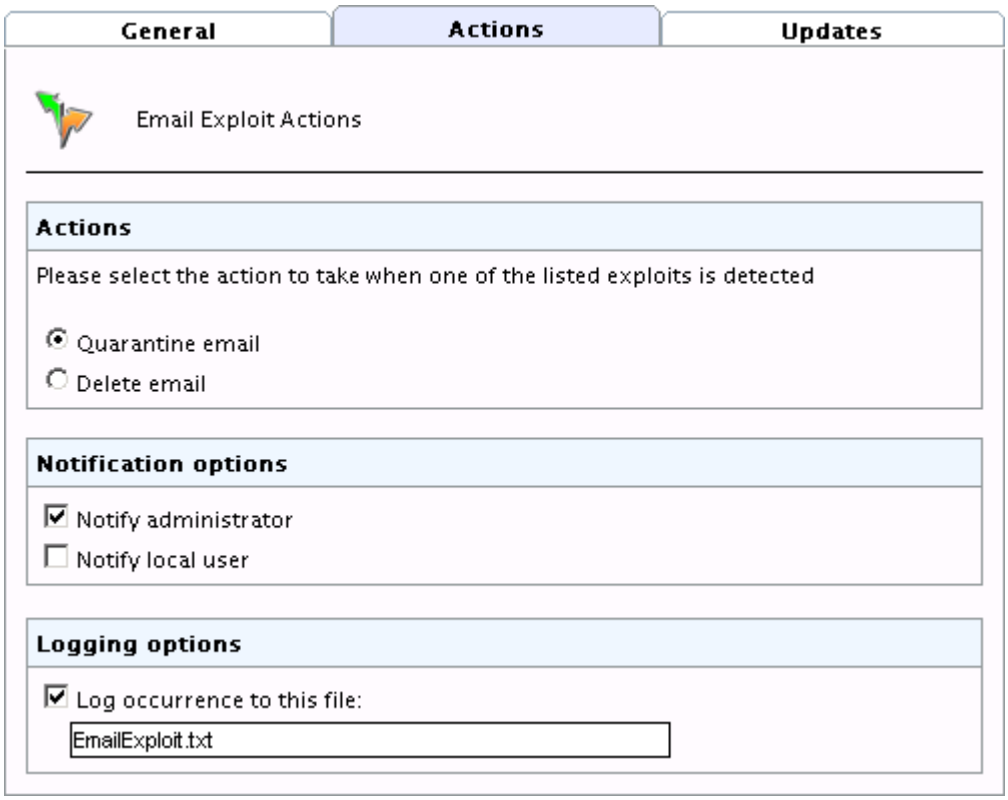
Screenshot 50 - Email Exploit Engine: General Tab

3. From the **General** tab, select whether to scan inbound and/or outbound emails.

Check inbound emails	Select this option to scan incoming emails
Check outbound emails	Select this option to scan outgoing emails

3. Click the **Actions** tab to configure what should be done when an email is blocked by the Email Exploit Engine.

NOTE: When GFI MailSecurity is installed on same machine as Microsoft Exchange 2003, GFI MailSecurity may not be able to block outbound emails, but instead replaces the blocked content (e.g. the attachment) with a threat report.



Screenshot 51 - Email Exploit Engine: Actions Tab

4. In the **Actions** area select one of the following options:

Quarantine email	Stores blocked emails in the Quarantine Store.
Delete email	Deletes blocked emails

NOTE: Actions always affect the whole email containing the blocked attachment, even if there are other attachments that do not contain exploits.

5. When an email exploit is detected, you can also inform the administrator and/or user by sending email notifications. To do this, from the **Notification options** area select:

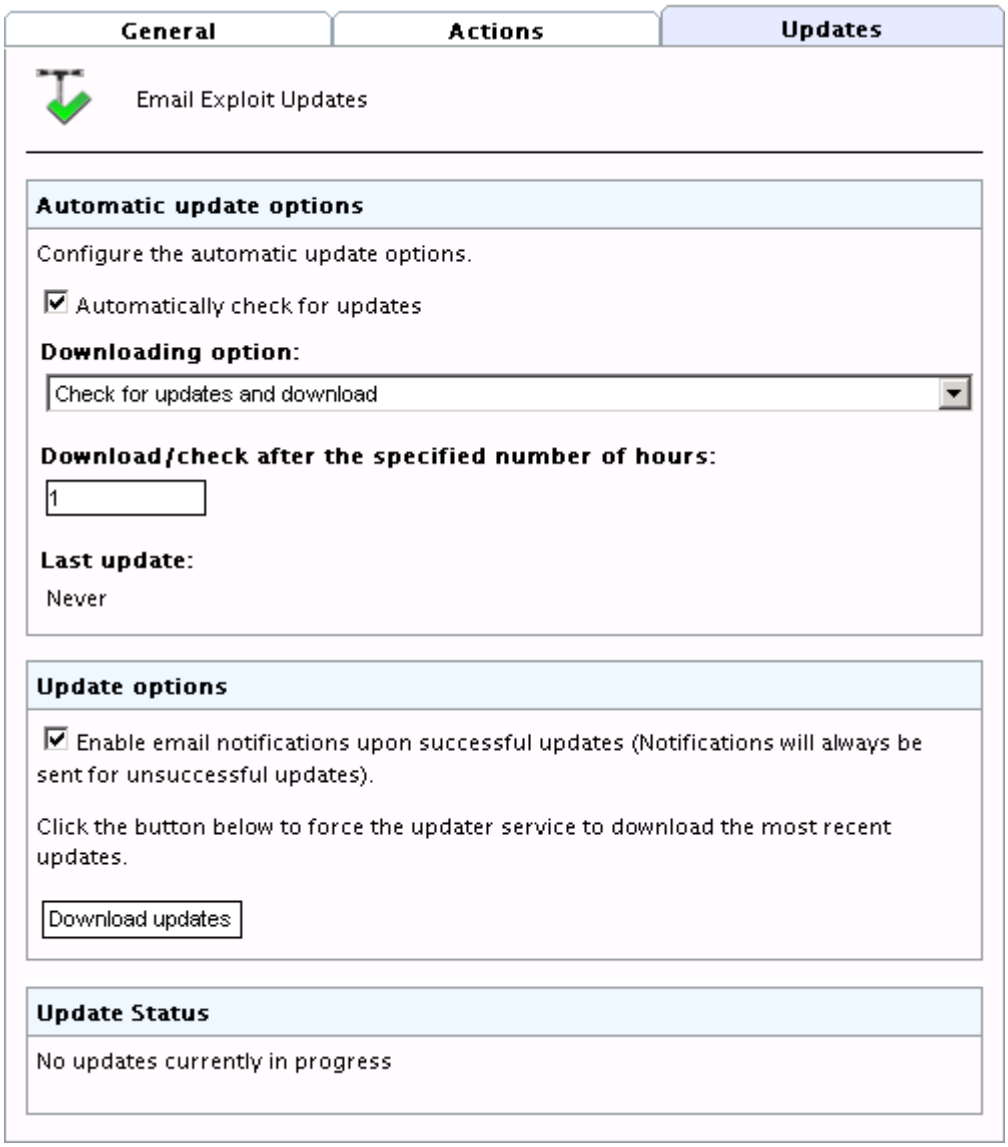
Notify administrator	Notify the administrator whenever this engine blocks an email. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Notify local user	Notify the email local recipients about the blocked email.

6. To log the activity of the Email Exploit Engine to a log file, select **Log rule occurrence to this file**. In the text box specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file will be stored in the following default location:

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Logs*<filename>.txt*

7. You can configure GFI MailSecurity to download Email Exploit Engine updates automatically or to notify the administrator whenever new updates are available. To configure updates, click the **Updates** tab.


General
Actions
Updates
Email Exploit Updates
Automatic update options
Configure the automatic update options.
Automatically check for updates
Downloading option:
Check for updates and download
Download/check after the specified number of hours:
1
Last update:
Never
Update options
Enable email notifications upon successful updates (Notifications will always be sent for unsuccessful updates).
Click the button below to force the updater service to download the most recent updates.
Download updates
Update Status
No updates currently in progress

Screenshot 52 - Email Exploit Engine: Updates Tab

8. To enable the automatic updating of Email Exploit Engine, select **Automatically check for updates** check box.

9. From the **Downloading options** list, select one of the following download options:

Only check for updates	Automatically check for updates and notify the administrator whenever updates are available. This option will NOT download the available updates automatically.
Check for updates and download	Automatically check for and download all available updates.

10. In **Download/check after the specified number of hours** text box, specify how often you want GFI MailSecurity to check for updates by typing an hourly interval.

11. In the **Update options** area, select **Enable email notifications upon successful updates** to send an email notification to the administrator whenever Trojan & Executable Scanner is updated successfully.

NOTE: An email notification is always sent when an update fails.

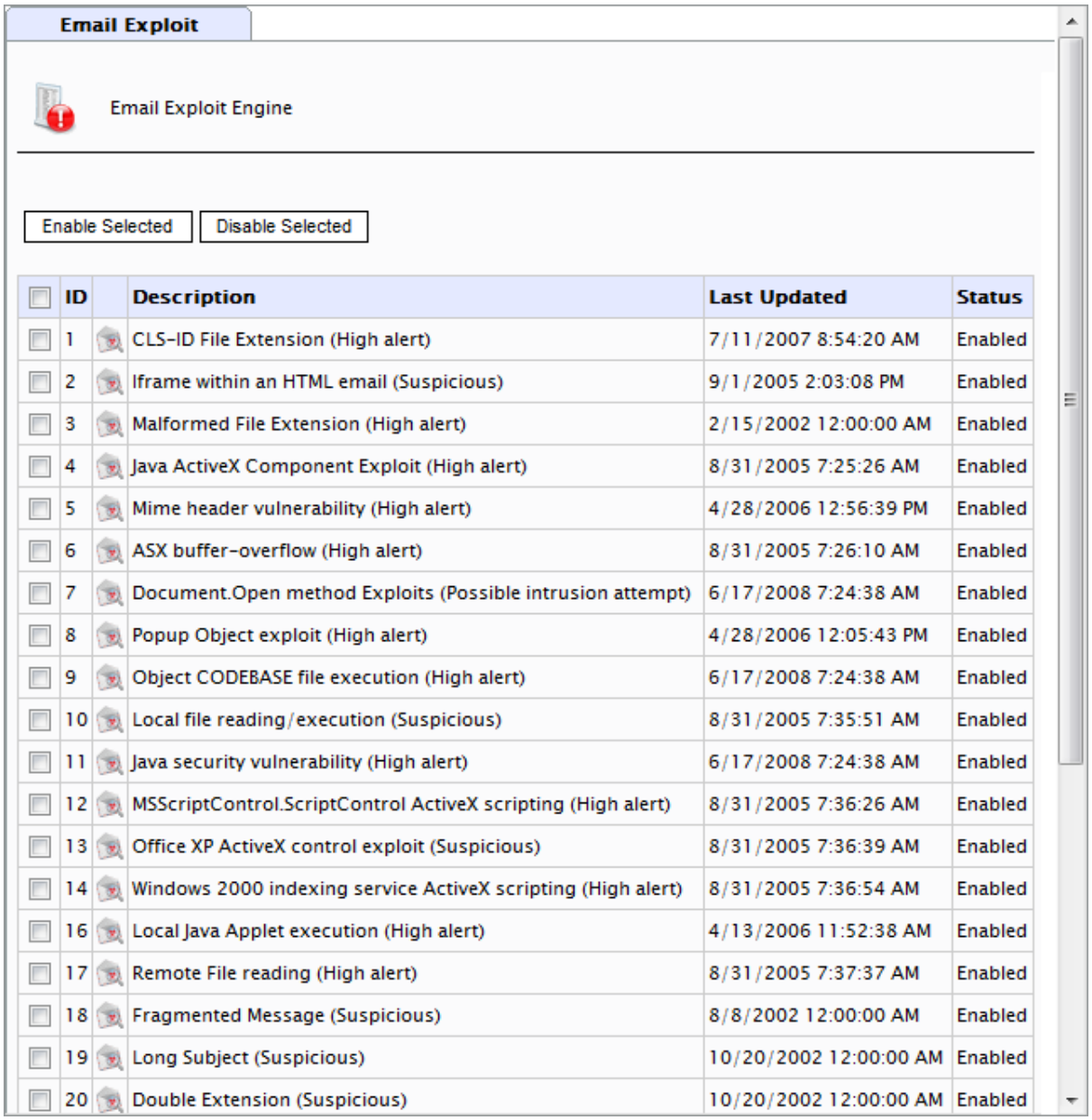
12. To check for and download updates immediately, click **Download updates**.

13. Click **Apply**.

6.5.3 Enabling/Disabling email exploits

To enable/disable email exploits:

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► Email Exploit Engine ► Exploit List**.



ID	Description	Last Updated	Status
1	CLS-ID File Extension (High alert)	7/11/2007 8:54:20 AM	Enabled
2	Iframe within an HTML email (Suspicious)	9/1/2005 2:03:08 PM	Enabled
3	Malformed File Extension (High alert)	2/15/2002 12:00:00 AM	Enabled
4	Java ActiveX Component Exploit (High alert)	8/31/2005 7:25:26 AM	Enabled
5	Mime header vulnerability (High alert)	4/28/2006 12:56:39 PM	Enabled
6	ASX buffer-overflow (High alert)	8/31/2005 7:26:10 AM	Enabled
7	Document.Open method Exploits (Possible intrusion attempt)	6/17/2008 7:24:38 AM	Enabled
8	Popup Object exploit (High alert)	4/28/2006 12:05:43 PM	Enabled
9	Object CODEBASE file execution (High alert)	6/17/2008 7:24:38 AM	Enabled
10	Local file reading/execution (Suspicious)	8/31/2005 7:35:51 AM	Enabled
11	Java security vulnerability (High alert)	6/17/2008 7:24:38 AM	Enabled
12	MSScriptControl.ScriptControl ActiveX scripting (High alert)	8/31/2005 7:36:26 AM	Enabled
13	Office XP ActiveX control exploit (Suspicious)	8/31/2005 7:36:39 AM	Enabled
14	Windows 2000 indexing service ActiveX scripting (High alert)	8/31/2005 7:36:54 AM	Enabled
16	Local Java Applet execution (High alert)	4/13/2006 11:52:38 AM	Enabled
17	Remote File reading (High alert)	8/31/2005 7:37:37 AM	Enabled
18	Fragmented Message (Suspicious)	8/8/2002 12:00:00 AM	Enabled
19	Long Subject (Suspicious)	10/20/2002 12:00:00 AM	Enabled
20	Double Extension (Suspicious)	10/20/2002 12:00:00 AM	Enabled

Screenshot 53 - Email Exploit list

2. Select the check box of the exploit(s) that you want to enable or disable.

3. Click **Enable Selected** or **Disable Selected** accordingly.

6.6 The HTML Sanitizer

6.6.1 Introduction

The HTML Sanitizer scans and removes scripting code within:

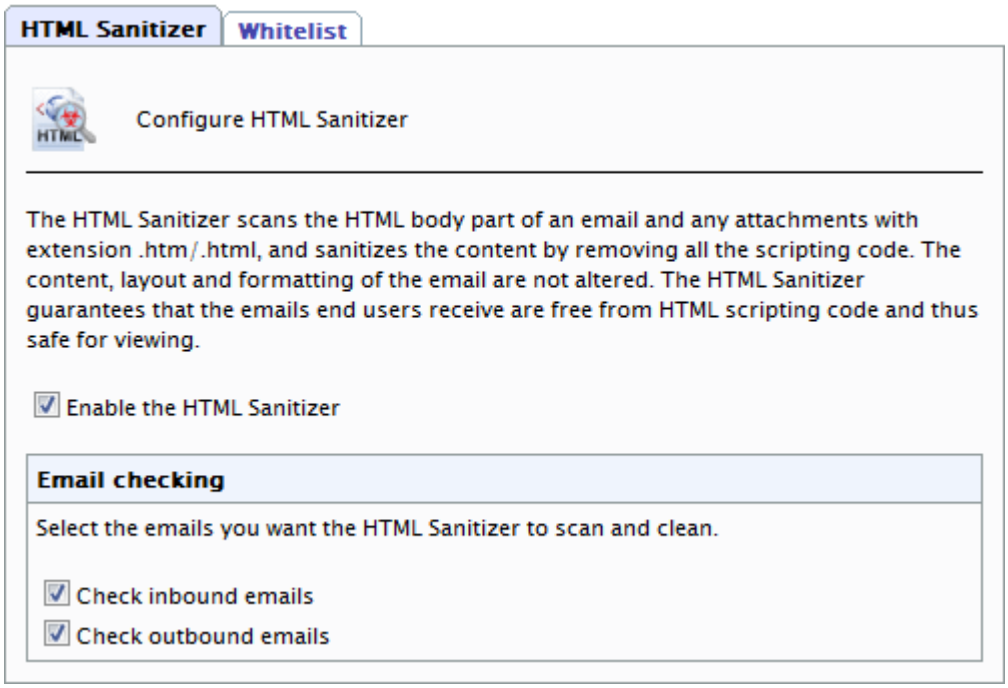
- the email body of emails that have the MIME type set to “text/html”
- all attachments of type “.htm” or “.html”.

Why remove HTML scripts?

The introduction of HTML email has allowed senders to include scripts in email that can be triggered automatically upon opening an email. HTML scripts are used both in a number of common viruses and in one-off attacks directed towards particular users/companies. In addition, HTML scripts are rarely used in legitimate emails.

6.6.2 Configuring the HTML Sanitizer

1. Navigate to **GFI MailSecurity ► Scanning & Filtering ► HTML Sanitizer**.


HTML Sanitizer
Whitelist
Configure HTML Sanitizer
The HTML Sanitizer scans the HTML body part of an email and any attachments with extension .htm/.html, and sanitizes the content by removing all the scripting code. The content, layout and formatting of the email are not altered. The HTML Sanitizer guarantees that the emails end users receive are free from HTML scripting code and thus safe for viewing.
Enable the HTML Sanitizer
Email checking
Select the emails you want the HTML Sanitizer to scan and clean.
Check inbound emails
Check outbound emails

Screenshot 54 - HTML Sanitizer configuration page

2. To enable the HTML Sanitizer, select **Enable the HTML Sanitizer** checkbox .

3. Select the emails to check for HTML scripts and clean, by selecting any of the following options:

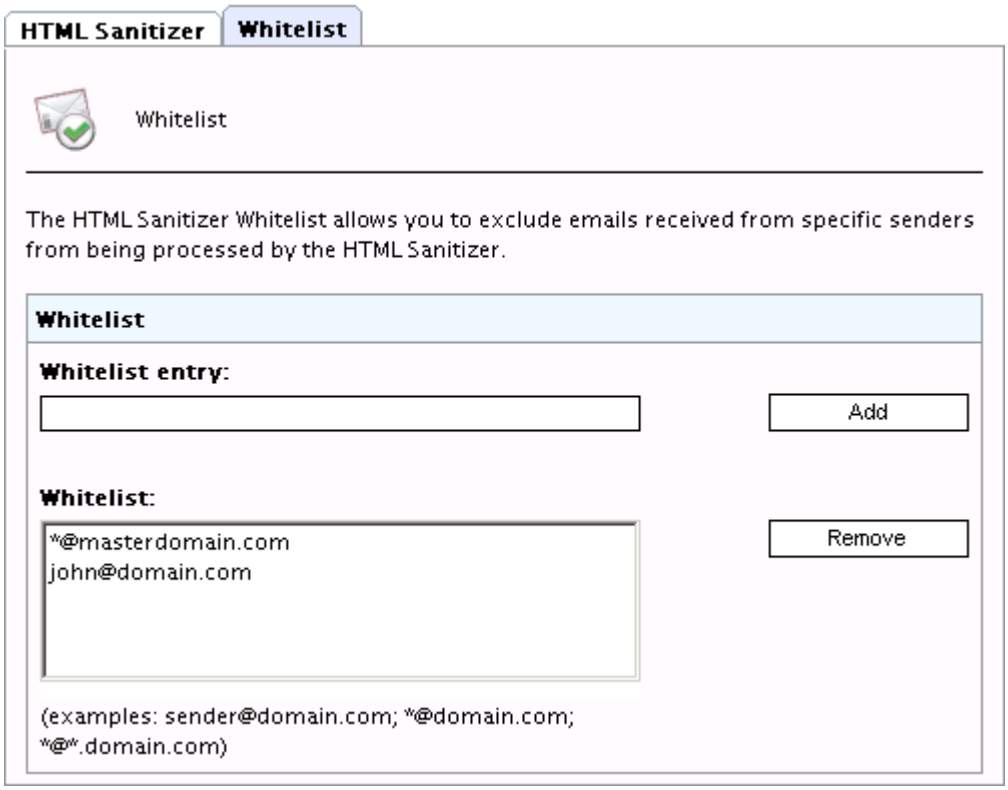
Check inbound emails	Scan and sanitize HTML scripts from all incoming emails.
Check outbound emails	Scan and sanitize HTML scripts from all outgoing emails.

4. Click **Apply**.

6.6.3 HTML Sanitizer Whitelist

The HTML Sanitizer Whitelist excludes emails received from specific senders from being processed by the HTML Sanitizer.

To manage senders in the HTML Sanitizer Whitelist, select the **Whitelist** tab from the **HTML Sanitizer** node.



Screenshot 55 - HTML Sanitizer Whitelist page

The list of whitelisted senders is displayed in the **Whitelist** area.

Adding an HTML Sanitizer Whitelist entry

1. In the **Whitelist entry** text box, key in an email address, an email domain (for example, *@domain.com) or an email sub-domains (for example, *@*.domain.com) and click **Add**.

2. Click **Apply**.

Deleting an HTML Sanitizer Whitelist entry

1. Select the entry to delete from the **Whitelist** area and click **Remove**.

2. Click **Apply**.

7 Quarantine

7.1 Introduction

The GFI MailSecurity Quarantine is a central repository where all emails that fail any of the content policy or content security checks are stored. This ensures that users do not receive malicious email in their mailbox and that no email is lost.

This chapter describes the three methods how administrators can manage quarantined emails:

- Via the GFI MailSecurity web interface - for more information refer to The Quarantine Store.
- Through an email (action form) sent to the administrator - for more information refer to Quarantine Action Forms.
- Using Quarantine RSS Feeds - for more information refer to Quarantine RSS feeds.

These quarantine management methods allow administrators to review, approve or delete quarantined emails. If the administrator approves a quarantined email, GFI MailSecurity immediately releases the email from the Quarantine Store and delivers it to its recipients.

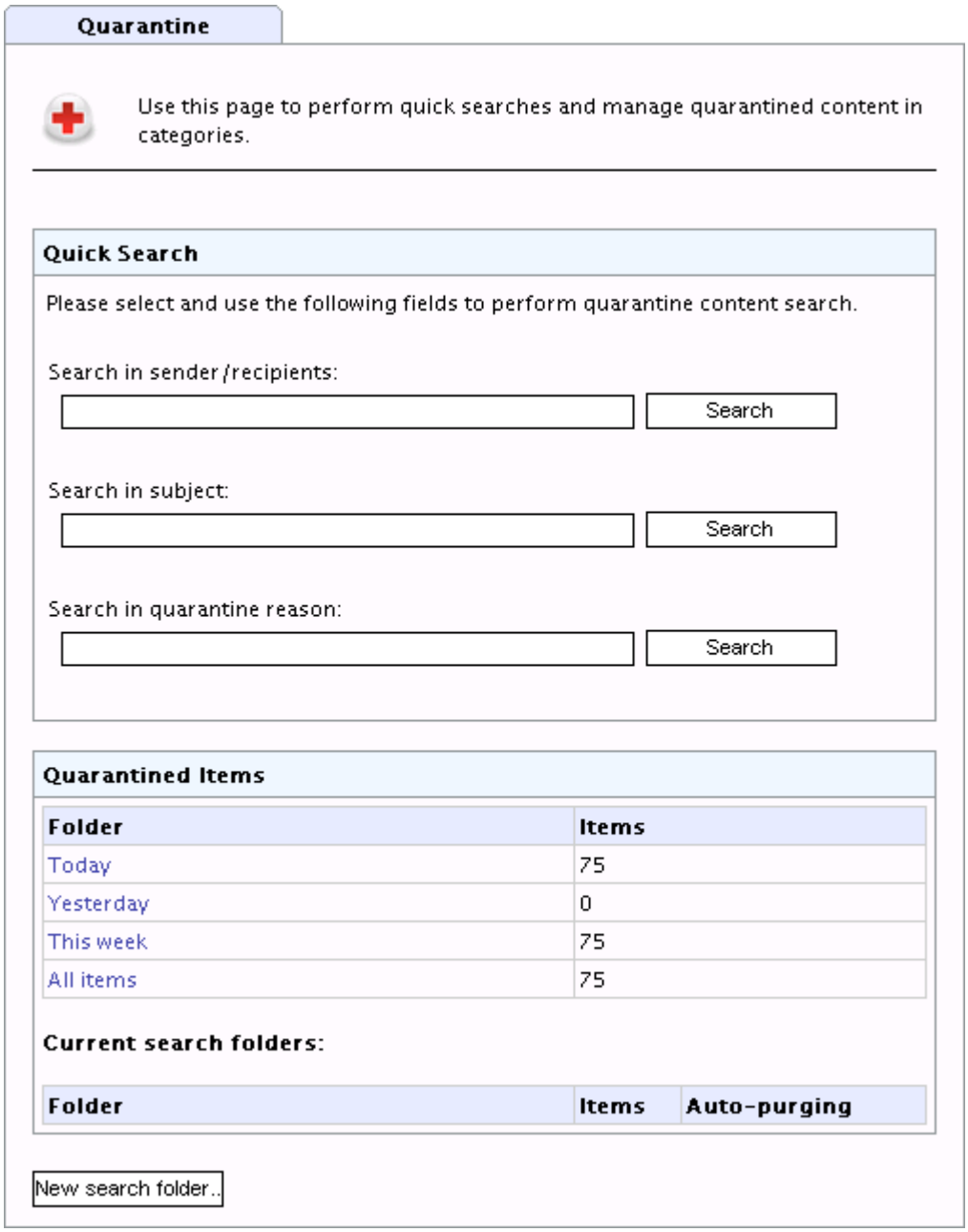
7.2 The Quarantine Store

The Quarantine Store is accessible from the GFI MailSecurity web interface and the administrator can manage quarantined emails.

To access the GFI MailSecurity Quarantine Store, navigate to **GFI MailSecurity ► Quarantine**.

7.2.1 Searching for quarantined emails

The administrator has various options to search through quarantined emails:



Screenshot 56 - Quarantine Store status page

Content search

From the **Quick Search** area of the Quarantine page, specify any of the following search criteria and click **Search** to display matching quarantined emails:

SEARCH CRITERIA	DESCRIPTION
Search in sender/recipients	Specify a name or email address of a sender or recipient to find quarantined emails sent from or addressed to that user. You can also specify part of the name or email address and GFI MailSecurity returns all matching senders/recipients.
Search in subject	Specify a keyword or phrase to find quarantined emails that contain that specific

	text in the subject.
Search in quarantine reason	Specify a keyword or phrase to find quarantined emails that contain that specific text in the quarantine reason.

Search by date

From the **Quarantined Items** area of the Quarantine page select one of the preconfigured folders that return quarantined emails depending on the date when the email was quarantined.

NOTE: These folders can also be accessed from the GFI MailSecurity tree as sub-nodes of the **Quarantine** node.

The default search folders that filter quarantined emails by date are:

- Today
- Yesterday
- This week

7.2.2 Search Folders

A Search Folder is a folder that has a custom search query associated to it and displays all quarantined emails that match the search query.

Examples of search folders:

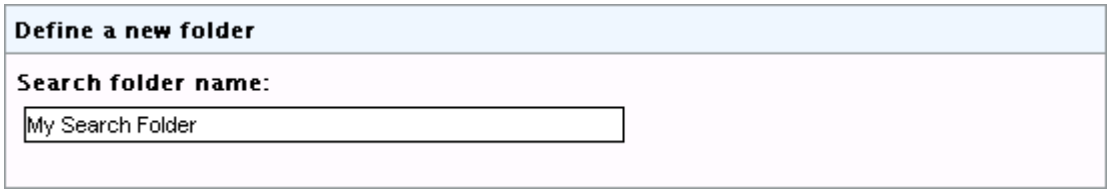
- A search folder that displays only outbound emails that were quarantined by the Virus Scanning Engines.
- A search folder that displays inbound emails that were quarantined in a particular date range and addressed to a particular user.

To display emails in a particular search folder navigate to **GFI MailSecurity ► Quarantine ► Search Folders** and click a search folder displayed in the **Quarantined Items** area.

Creating a new Search Folder

1. Navigate to **GFI MailSecurity ► Quarantine ► Search Folders**.

2. Click **New search folder…**.



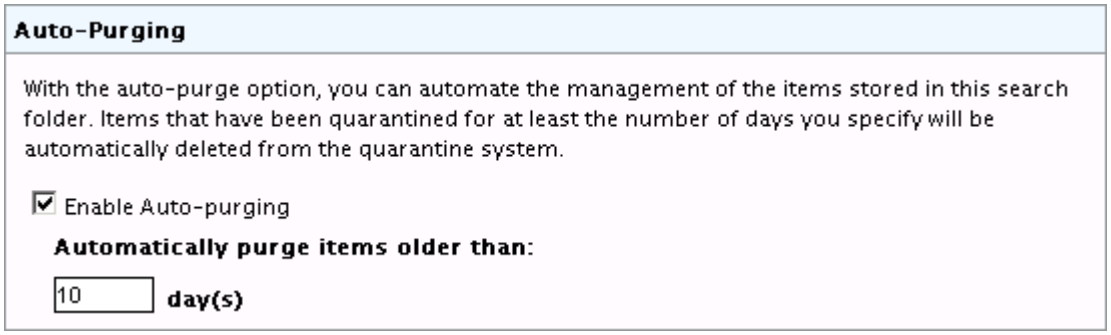
Screenshot 57 - New Search Folder - folder name

3. In the **Search folder name** text box, key in a name for the new search folder.

Screenshot 58 - New Search Folder - selecting the source

4. If GFI MailSecurity is installed on the Microsoft Exchange Server machine, you can limit the emails in this search folder to those blocked from a particular source. From the **Item source** area, select one of the following sources:

Information Store (VSAPI)	Quarantined items forming part of the Information Store.
Information Store (Transport)	Quarantined items forming part of the Information Store that were scanned through the Hub Transport Agent. This option is only available when GFI MailSecurity is installed on a Microsoft Exchange Server 2007/2010 machine with the Hub Transport Server Role installed.
Gateway (SMTP)	Inbound or outbound quarantined emails, SMTP traffic, will be displayed.
Any	All quarantined items will be displayed irrespective of the source.

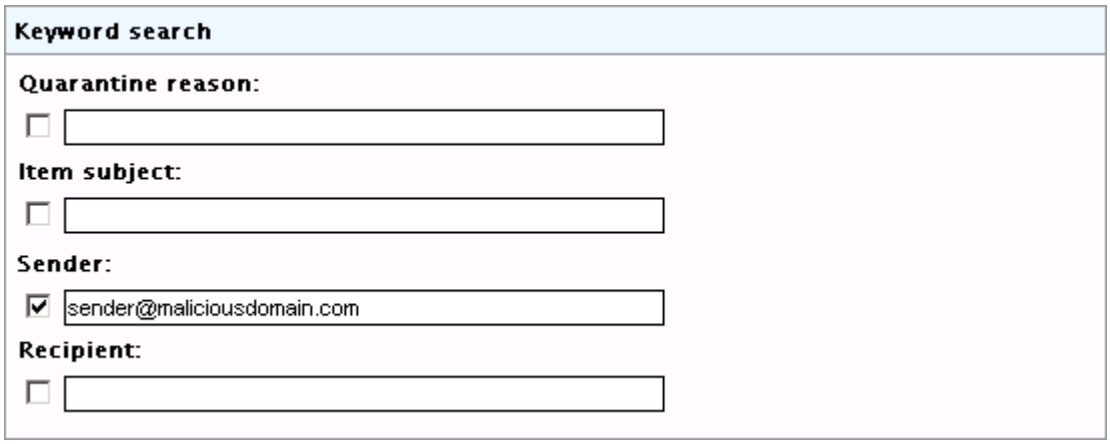

Auto-Purging
With the auto-purge option, you can automate the management of the items stored in this search folder. Items that have been quarantined for at least the number of days you specify will be automatically deleted from the quarantine system.
Enable Auto-purging
Automatically purge items older than:
10
day(s)

Screenshot 59 - New Search Folder - auto-purge settings

5. You can also configure auto-purge settings for this search folder. If you configure auto purging on a search folder, GFI MailSecurity deletes any emails in that search folder that are older than the number of days specified.

To enable auto-purging, select **Enable Auto-purging** and specify a value in the **Automatically purge items older than** box.

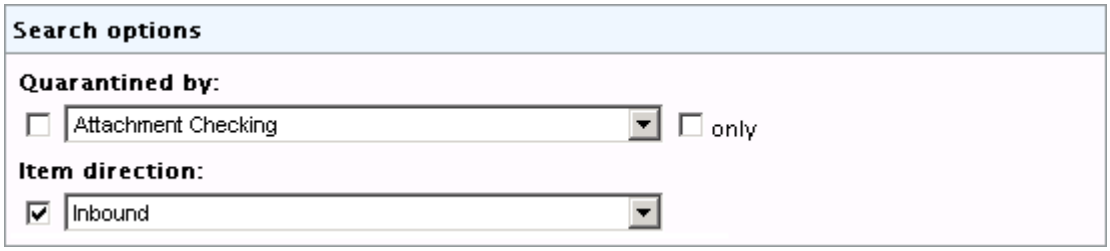
Purged items are not recoverable.



Screenshot 60 - New Search Folder - searching by keywords

6. In the Keywords search area specify the search criteria that will determine the contents of this folder. You can select any of the following options:

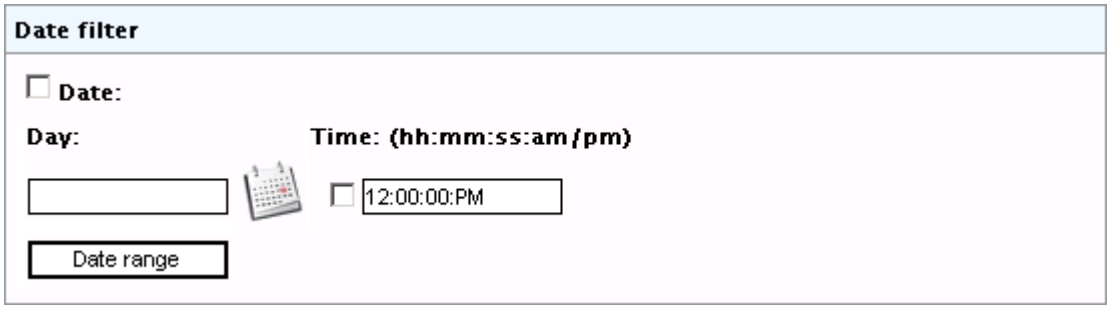
Quarantine reason	Search for emails containing specific text in the quarantine reason.
Item subject	Search for emails containing specific text in the email subject.
Sender	Search for emails sent from a particular email address.
Recipient	Search for emails sent to a particular email address.



Screenshot 61 - New Search Folder - search options

7. Specify other search criteria in the **Search options** area:

Quarantined by	Search for emails quarantined by a specific filter. Select a filter from the list next to this option (for example, Attachment Filtering). **NOTE:** Since an email can be blocked by multiple security threats or content policy infringements, you can choose to show **only** emails that were blocked by one specific filter. To do this, select **only** next to the filters dropdown list.
Item direction	Limits the items included in this search folder to either **Inbound** or **Outbound** emails. **NOTE 1**: Leave this option unselected if you want to include both Inbound and Outbound emails in this Search Folder. **NOTE 2**: This option is only available when GFI MailSecurity is not installed on a Microsoft Exchange machine, or when the Item source selected is Gateway.



Screenshot 62 - New Search Folder - filtering by date

8. A search folder can also filter emails by date. From the **Date filter** area select the **Date** checkbox and specify:

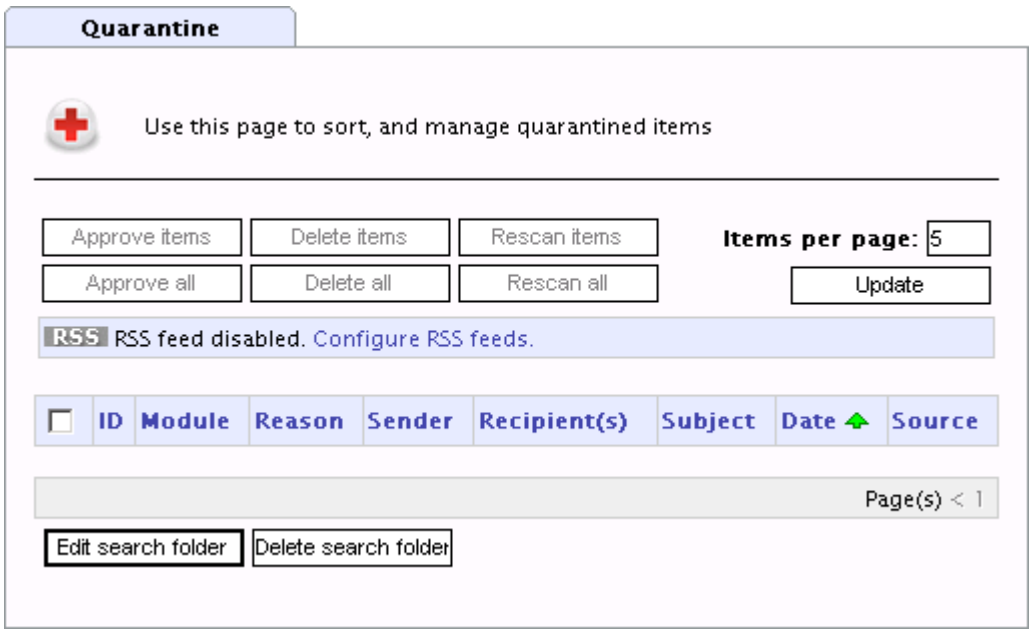
Specific date	Filters emails by a specific date. Key in or select a date in the **Day** text box. You can also search by a specific email time. To do this, select the **Time** check box and input a time value.
Date Range	Filters emails by a range of dates. Specify a start date in the **Day from** box and an end date in the **Day to** box. You can also search by a time range. To do this, select the **Time from** and **Time to** checkboxes, and specify a time range.

NOTE: To search for a time range in one particular day, select **Date Range** and input the same date in both **Day from** and **Day to** boxes. Specify the time range in the **Time from** and **Time to** boxes.

9. Click **Save folder** to create the search folder.

Modifying a Search Folder

1. Navigate to **GFI MailSecurity ► Quarantine ► Search Folders ► *<search folder to modify>***.



Screenshot 63 - Search Folder options

2. Click **Edit search folder** and make the required changes to the search folder properties.

3. Click **Save folder** to apply changes.

Deleting Search Folders

1. Navigate to **GFI MailSecurity ► Quarantine ► Search Folders ► *<search folder to modify>***.

2. Click **Delete search folder**.

3. Click **OK** to confirm deletion of the folder.

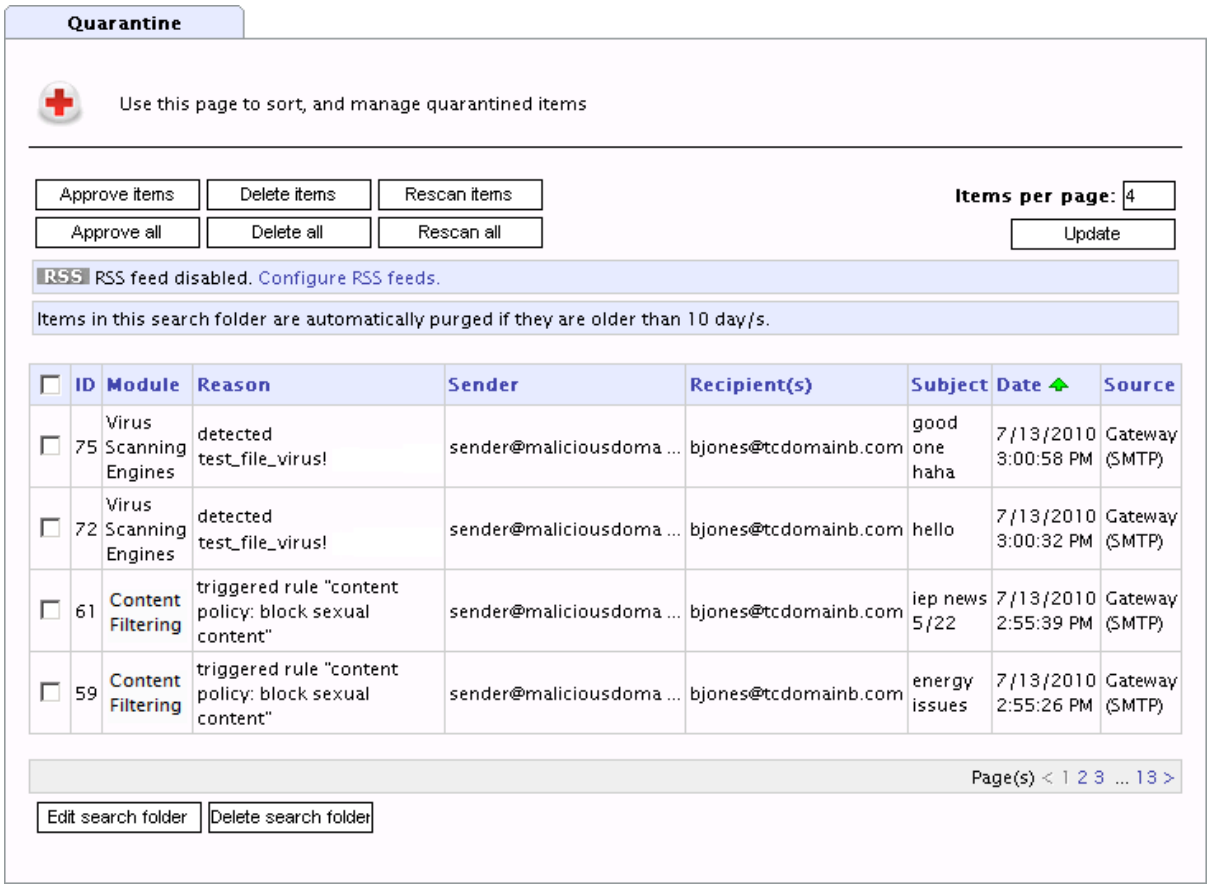
NOTE: When deleting a search folder, no emails are deleted from the quarantine store.

7.2.3 Approving quarantined emails

There might be instances where GFI MailSecurity incorrectly identifies as malicious (false positive), or the email contains an attachment that triggered a particular filter but you still want to deliver to its recipient (for example, a .jpg image that triggered Attachment Filtering). GFI MailSecurity allows the administrator to approve a quarantine email so that the email is released from the Quarantine Store and delivered to its intended recipients.

To approve emails:

1. Use the search features described in the previous sections to return a list of quarantined emails.


Quarantine
Use this page to sort, and manage quarantined items
Approve items
Delete items
Rescan items
Approve all
Delete all
Rescan all
Items per page: 4
Update
RSS feed disabled. Configure RSS feeds.
Items in this search folder are automatically purged if they are older than 10 day/s.
ID Module Reason Sender Recipient(s) Subject Date Source
75 Virus Scanning Engines detected test_file_virus! sender@maliciousdoma ... bjones@tcdomainb.com good one haha 7/13/2010 3:00:58 PM Gateway (SMTP)
72 Virus Scanning Engines detected test_file_virus! sender@maliciousdoma ... bjones@tcdomainb.com hello 7/13/2010 3:00:32 PM Gateway (SMTP)
61 Content Filtering triggered rule "content policy: block sexual content" sender@maliciousdoma ... bjones@tcdomainb.com iep news 5/22 7/13/2010 2:55:39 PM Gateway (SMTP)
59 Content Filtering triggered rule "content policy: block sexual content" sender@maliciousdoma ... bjones@tcdomainb.com energy issues 7/13/2010 2:55:26 PM Gateway (SMTP)
Page(s) < 1 2 3 ... 13 >
Edit search folder
Delete search folder

Screenshot 64 - List of Quarantined Emails in Search Folder

2. Select the checkbox next to the quarantined email(s) to approve and click **Approve**.

NOTE: Alternatively, click **Approve all** to approve all emails in the list.

Sanitize and Approve

GFI MailSecurity also allows you to remove malicious html scripts in the email body or in html attachments before approving.

NOTE: Emails quarantined by the Information Store (VSAPI) source cannot be sanitized.

To sanitize and approve a quarantined email:

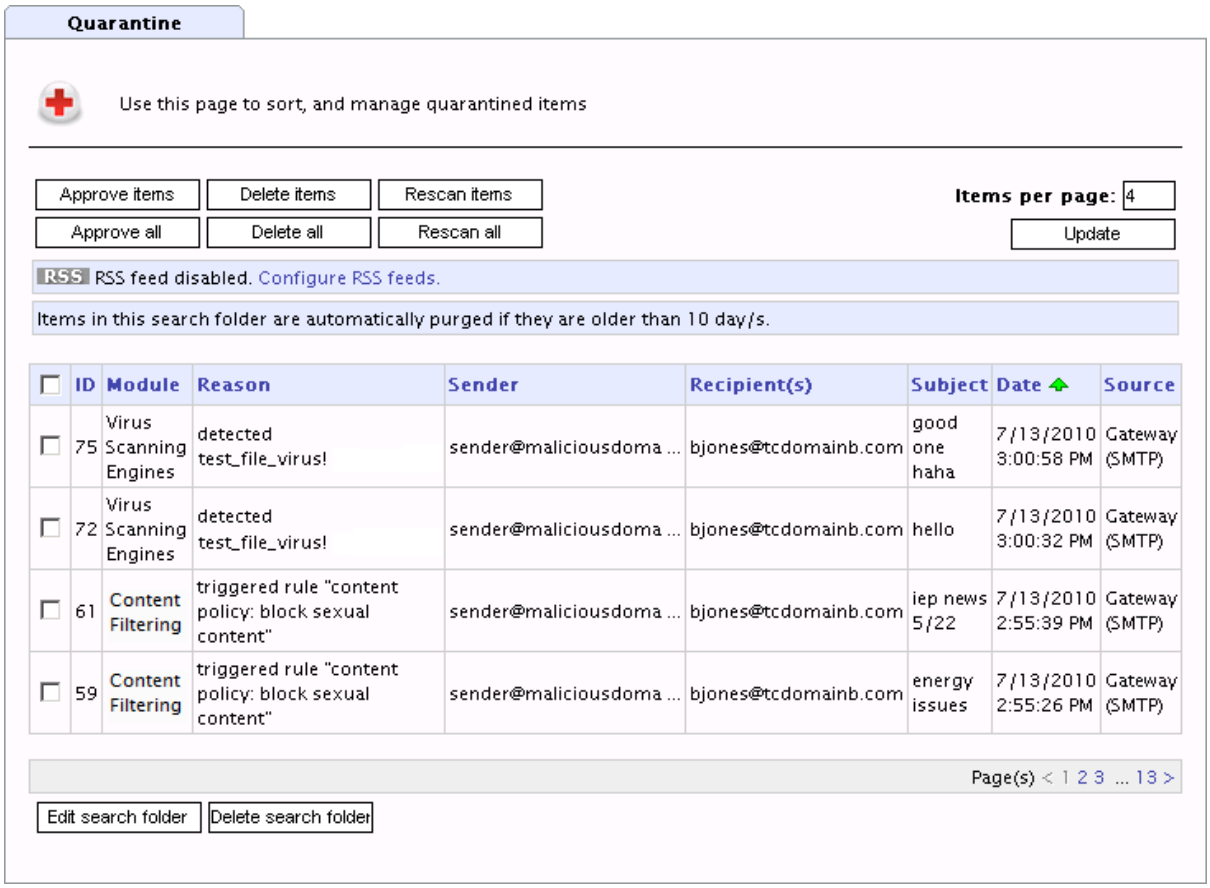
1. Use the search features described in the previous sections to return a list of quarantined emails.

2. Click on the email to view the email contents.

3. Click **Sanitize and Approve**.

7.2.4 Permanently deleting quarantined emails

1. Use the search features described in the previous sections to return a list of quarantined emails.


Quarantine
Use this page to sort, and manage quarantined items
Approve items
Delete items
Rescan items
Approve all
Delete all
Rescan all
Items per page: 4
Update
RSS feed disabled. Configure RSS feeds.
Items in this search folder are automatically purged if they are older than 10 day/s.
ID Module Reason Sender Recipient(s) Subject Date Source
75 Virus Scanning Engines detected test_file_virus! sender@maliciousdoma ... bjones@tcdomainb.com good one haha 7/13/2010 3:00:58 PM Gateway (SMTP)
72 Virus Scanning Engines detected test_file_virus! sender@maliciousdoma ... bjones@tcdomainb.com hello 7/13/2010 3:00:32 PM Gateway (SMTP)
61 Content Filtering triggered rule "content policy: block sexual content" sender@maliciousdoma ... bjones@tcdomainb.com iep news 5/22 7/13/2010 2:55:39 PM Gateway (SMTP)
59 Content Filtering triggered rule "content policy: block sexual content" sender@maliciousdoma ... bjones@tcdomainb.com energy issues 7/13/2010 2:55:26 PM Gateway (SMTP)
Page(s) < 1 2 3 ... 13 >
Edit search folder
Delete search folder

Screenshot 65 - List of Quarantined Emails in selected Search Folder

2. Select the checkbox next to the quarantined email(s) to approve and click **Delete items**.

NOTE: Alternatively, click **Delete all** to approve all emails in the list.

Delete and Notify

You can also notify the intended recipients when you delete an email from quarantine.

1. Use the search features described in the previous sections to return a list of quarantined emails.

2. Click on the email to view the email contents.

3. Click **Delete and Notify**.

7.2.5 Rescanning quarantined emails

The Quarantine Store allows you to rescan quarantined emails. For example, to re-check an email with updated anti-virus signatures.

1. Use the search features described in the previous sections to return a list of quarantined emails.

2. Select the checkbox next to the quarantined email(s) to rescan and click **Rescan items**.

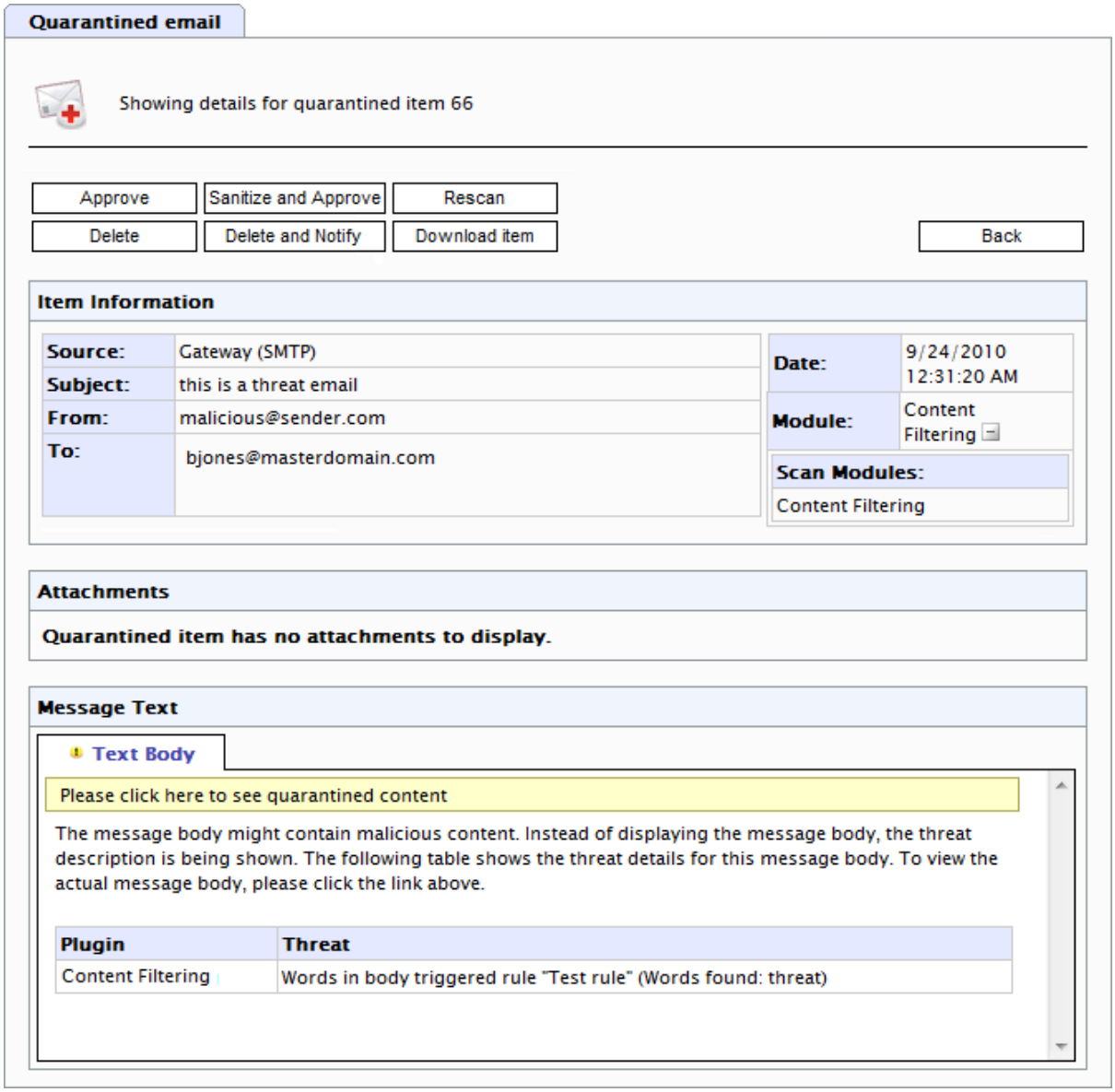
NOTE: Alternatively, click **Rescan all** to approve all emails in the list.

7.2.6 Viewing the full security threat report of an email

To view the full security threat report of a quarantined email:

1. Use the search features described in the previous sections to return a list of quarantined emails.

2. Click on the email to view the full security threat report.



Screenshot 66 - Viewing the full security threat report of a quarantined email

3. Click **Back** to return to the list of quarantined emails.

7.2.7 Downloading quarantined email

Emails in Quarantine Store may contain malicious content. Use this feature with caution.

1. Use the search features described in the previous sections to return a list of quarantined emails.

2. Click on the email to download.

3. Click **Download Item**.

4. Click **OK** in the confirmation dialog.

5. Select to open or save the email in .eml format.

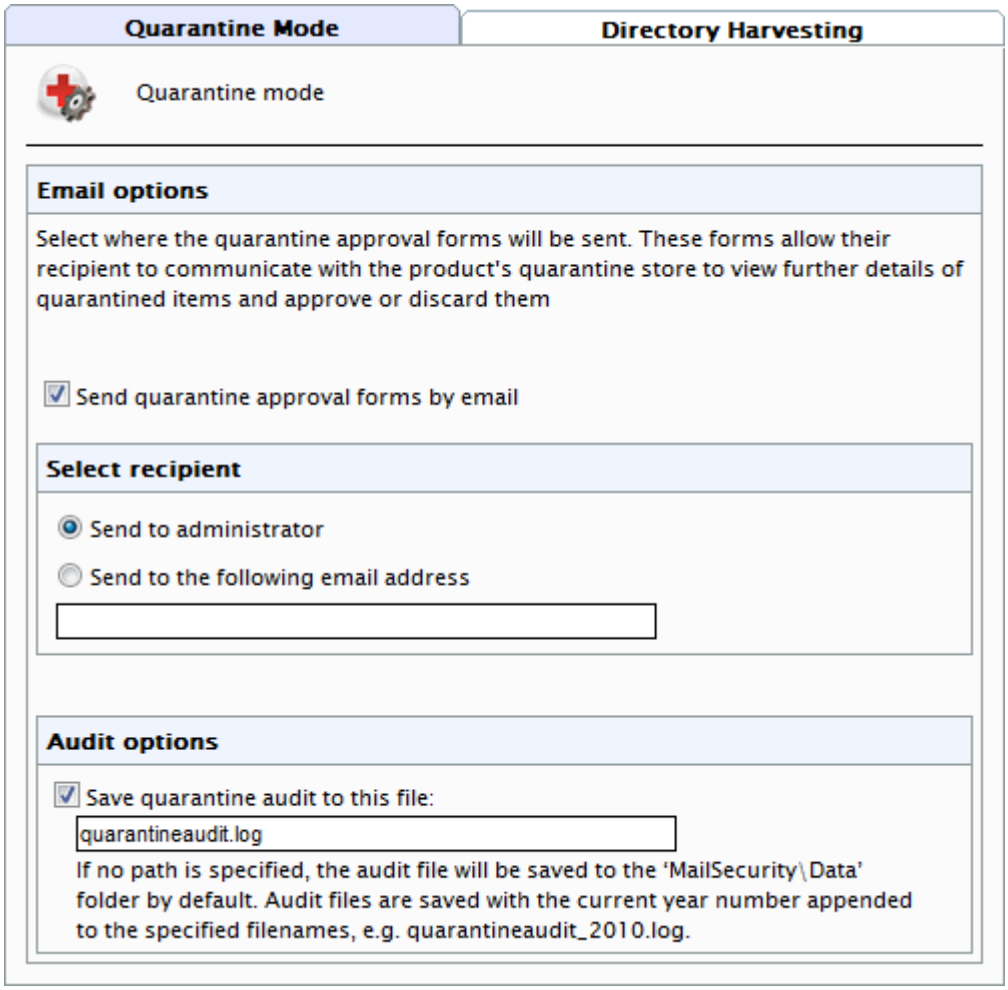
7.3 Quarantine Action Forms

GFI MailSecurity can also be configured to notify the administrator or authorized users via email (Quarantine Action Form) whenever an email is quarantined.

The Quarantine Action Form contains details related to the quarantined email including the reason why it was blocked and any attachments that were included in the email. The administrator can then action the quarantined email (for example, approve the email) directly from the email client.

7.3.1 Enabling Quarantine Action Forms

1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine Options**.


Quarantine Mode
Directory Harvesting
Quarantine mode
Email options
Select where the quarantine approval forms will be sent. These forms allow their recipient to communicate with the product's quarantine store to view further details of quarantined items and approve or discard them
Send quarantine approval forms by email
Select recipient
Send to administrator
Send to the following email address
Audit options
Save quarantine audit to this file:
quarantineaudit.log
If no path is specified, the audit file will be saved to the 'MailSecurity\Data' folder by default. Audit files are saved with the current year number appended to the specified filenames, e.g. quarantineaudit_2010.log.

Screenshot 67 - Quarantine Options configuration page

2. In the **Quarantine mode** page, select **Send quarantine approval forms by email** checkbox to enable the sending of Quarantine Action Forms.

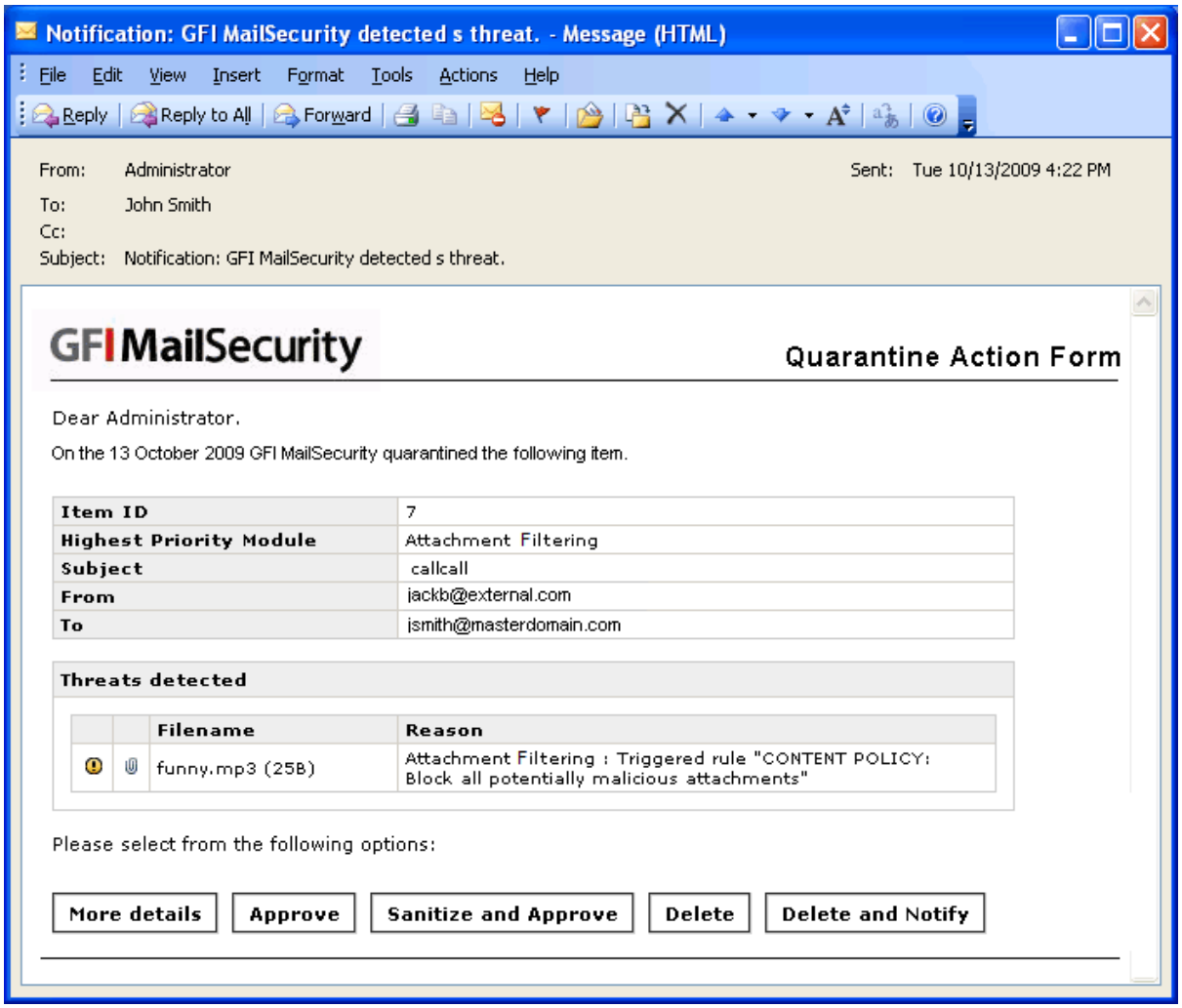
3. From the **Select recipient** area, specify the recipient of the Quarantine Action Forms:

Send to administrator	Sends Quarantine Action Forms to the administrator. To configure the administrator's email address refer to chapter Configuring the administrator's email address.
Send to the following email address	Sends Quarantine Action Forms to another email address. Key in the recipient in the text box provided.

4. Click **Apply**.

7.3.2 Reviewing quarantined emails

Recipients of the Quarantine Action Forms can carry out various actions on quarantined emails directly from the email client.



Screenshot 68 - The Quarantine Action Form

When a Quarantine Action Form is received, review it and select one of the following actions directly from the Quarantine Action Form's body:

More details	Launches the Quarantine Store page containing further information about this email.
Approve	Release the email from the Quarantine Store and deliver it to its intended recipients.
Sanitize and Approve	Sanitize the email from malicious content, release it from the Quarantine Store and deliver it to its intended recipients.
Delete	Permanently deletes the email.
Delete and Notify	Permanently delete the email and send an email notification to the email's recipient.

7.3.3 Logging quarantine actions

GFI MailSecurity provides the option to store a log of actions taken on quarantined emails. Use this feature, for example, in environments where multiple administrators are assigned the task to review quarantined emails.

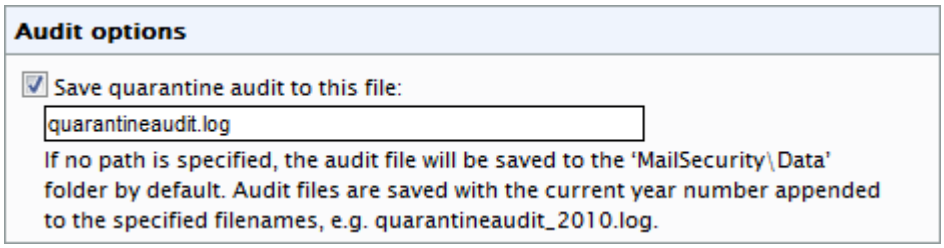
Each quarantine action is displayed in the following format:

```
Date, Time, User, Operation, Sender, Recipients, Subject
```

For example: `"2010-09-28", "9:25:05", "Administrator", "Approve", "malicious@external.com", "bob.jones@mydomain.com", "EmailSubject"`

To enable this feature:

1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine Options**.


Audit options
Save quarantine audit to this file:
quarantineaudit.log
If no path is specified, the audit file will be saved to the 'MailSecurity\Data' folder by default. Audit files are saved with the current year number appended to the specified filenames, e.g. quarantineaudit_2010.log.

Screenshot 69 - Quarantine Options configuration page

2. In the **Audit options** area, select **Save quarantine audit to this file**.

3. Specify where to store the audit file and the filename. Key in either:

- a file name in .LOG format - This option stores the audit file in

  <GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Data\

- A custom path and file name in .LOG format - This option stores the audit file in a custom location

NOTE: The year is appended to the audit file name and hence a new audit file is automatically created each year. This prevents that the file becomes very large.

4. Click **Apply**.

7.4 Quarantine RSS feeds

RSS (Really Simple Syndication) is a protocol used to distribute frequently updatable content or feeds (for example, news items) with its subscribers. An RSS Feed Reader is required by subscribers to view RSS feeds. RSS feeds usually include a summary of the content and a link to view the full article.

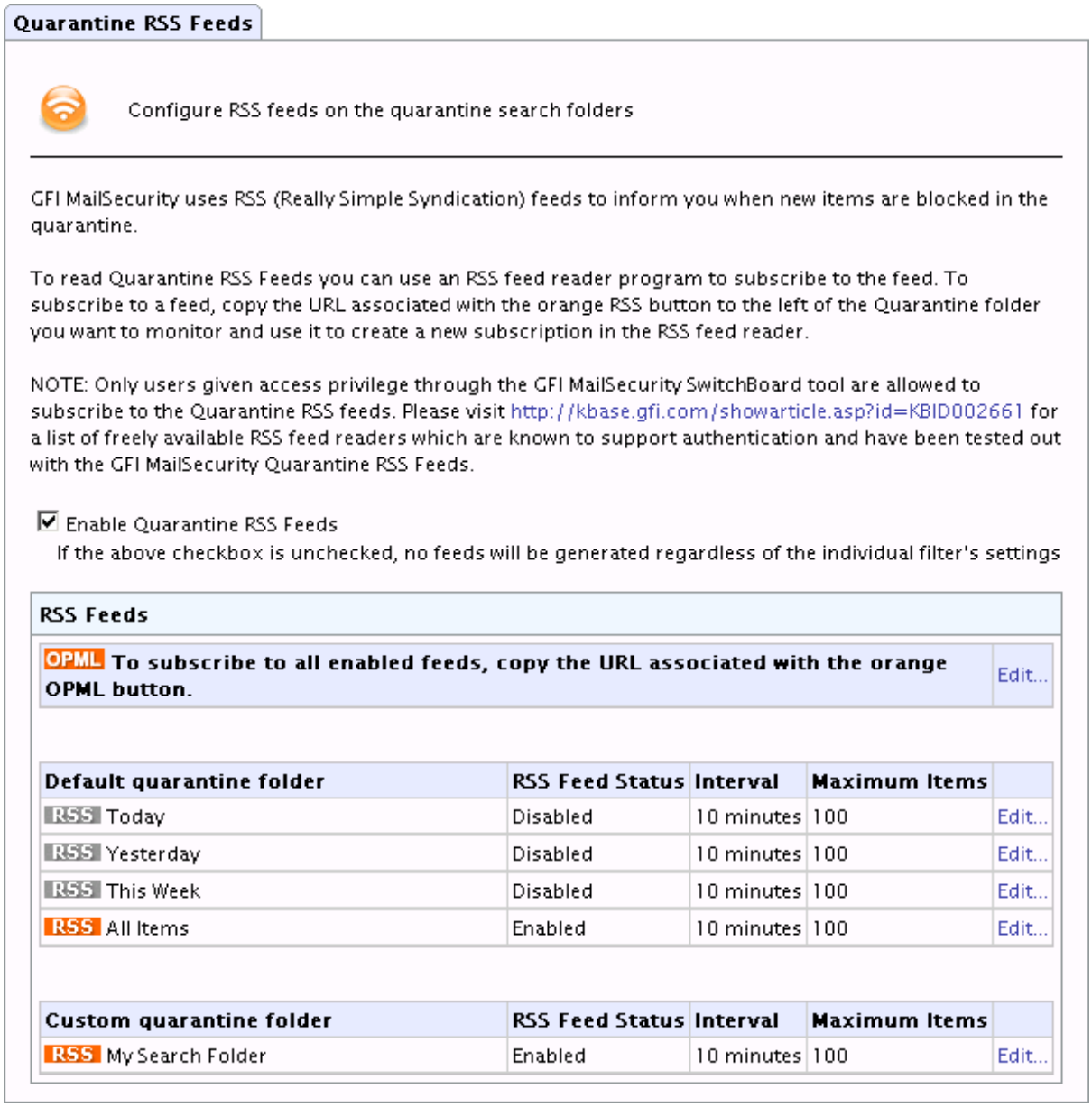
To facilitate the monitoring of quarantined emails, RSS feeds can be used. The Quarantine RSS feed displays quarantined emails for management of these emails.

NOTE: GFI MailSecurity Quarantine RSS feeds can be used on most RSS Feed Readers. For a list of freely available RSS Feed Readers that were tested with GFI MailSecurity Quarantine RSS feeds refer to:

http://kbase.gfi.com/showarticle.asp?id=KBID002661.

7.4.1 Enabling Quarantine RSS Feeds

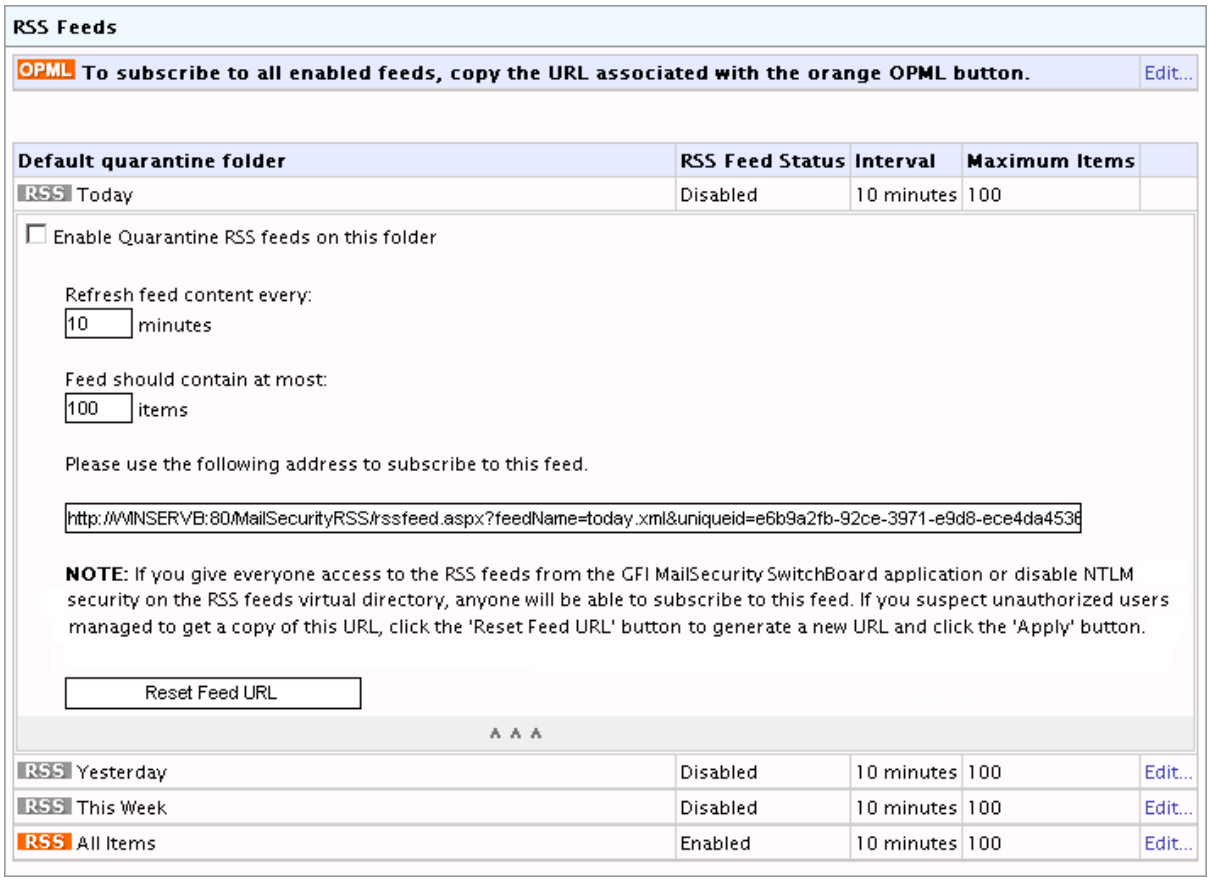
1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine RSS Feeds**.


Quarantine RSS Feeds
Configure RSS feeds on the quarantine search folders
GFI MailSecurity uses RSS (Really Simple Syndication) feeds to inform you when new items are blocked in the quarantine.
To read Quarantine RSS Feeds you can use an RSS feed reader program to subscribe to the feed. To subscribe to a feed, copy the URL associated with the orange RSS button to the left of the Quarantine folder you want to monitor and use it to create a new subscription in the RSS feed reader.
NOTE: Only users given access privilege through the GFI MailSecurity SwitchBoard tool are allowed to subscribe to the Quarantine RSS feeds. Please visit http://kbase.gfi.com/showarticle.asp?id=KBID002661 for a list of freely available RSS feed readers which are known to support authentication and have been tested out with the GFI MailSecurity Quarantine RSS Feeds.
Enable Quarantine RSS Feeds
If the above checkbox is unchecked, no feeds will be generated regardless of the individual filter's settings
RSS Feeds
OPML To subscribe to all enabled feeds, copy the URL associated with the orange OPML button.
Edit...
Default quarantine folder
RSS Feed Status
Interval
Maximum Items
RSS Today
Disabled
10 minutes
100
Edit...
RSS Yesterday
Disabled
10 minutes
100
Edit...
RSS This Week
Disabled
10 minutes
100
Edit...
RSS All Items
Enabled
10 minutes
100
Edit...
Custom quarantine folder
RSS Feed Status
Interval
Maximum Items
RSS My Search Folder
Enabled
10 minutes
100
Edit...

Screenshot 70 - Quarantine RSS feeds

2. Select the **Enable Quarantine RSS Feeds** checkbox.

3. From the **RSS Feeds** area, click **Edit** to the right of the quarantine search folder for which to enable RSS feeds.


RSS Feeds
OPML To subscribe to all enabled feeds, copy the URL associated with the orange OPML button.
Edit...
Default quarantine folder
RSS Feed Status
Interval
Maximum Items
RSS Today
Disabled
10 minutes
100
Enable Quarantine RSS feeds on this folder
Refresh feed content every:
10
minutes
Feed should contain at most:
100
items
Please use the following address to subscribe to this feed.
http://WINSERVB:80/MailSecurityRSS/rssfeed.aspx?feedName=today.xml&uniqueid=e6b9a2fb-92ce-3971-e9d8-ece4da4536
NOTE: If you give everyone access to the RSS feeds from the GFI MailSecurity SwitchBoard application or disable NTLM security on the RSS feeds virtual directory, anyone will be able to subscribe to this feed. If you suspect unauthorized users managed to get a copy of this URL, click the 'Reset Feed URL' button to generate a new URL and click the 'Apply' button.
Reset Feed URL
RSS Yesterday
Disabled
10 minutes
100
Edit...
RSS This Week
Disabled
10 minutes
100
Edit...
RSS All Items
Enabled
10 minutes
100
Edit...

Screenshot 71 - Quarantine folder RSS feed

4. Select **Enable Quarantine RSS feeds on this folder** checkbox.

5. Specify the refresh interval in minutes in the **Refresh feed content every** text box. The default value is 10 minutes.

6. Specify the maximum number of items you want the feed to include in the **Feed should contain at most** text box. The default value is 100 items.

NOTE: You can change the URL of an RSS feed by clicking **Reset Feed URL**. To change the URL of all enabled RSS feeds, click **Edit** to the right of the **OPML** entry and click **Reset all the URLs**. When changing URLs, ensure to update all present subscriptions accordingly.

7. Click **Apply**.

7.4.2 Subscribing to Quarantine RSS feeds

Subscribing to all enabled Quarantine RSS feeds

1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine RSS Feeds**.

2. In the RSS Feeds area, right-click on OPML icon and click **Copy Shortcut** to copy the RSS feed URL.

3. Use the copied URL in your RSS Feed Reader application to create a new RSS feed subscription.

Subscribing to a search folder Quarantine RSS feed

To subscribe to an RSS feed of a default or custom search folder:

1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine RSS Feeds**.

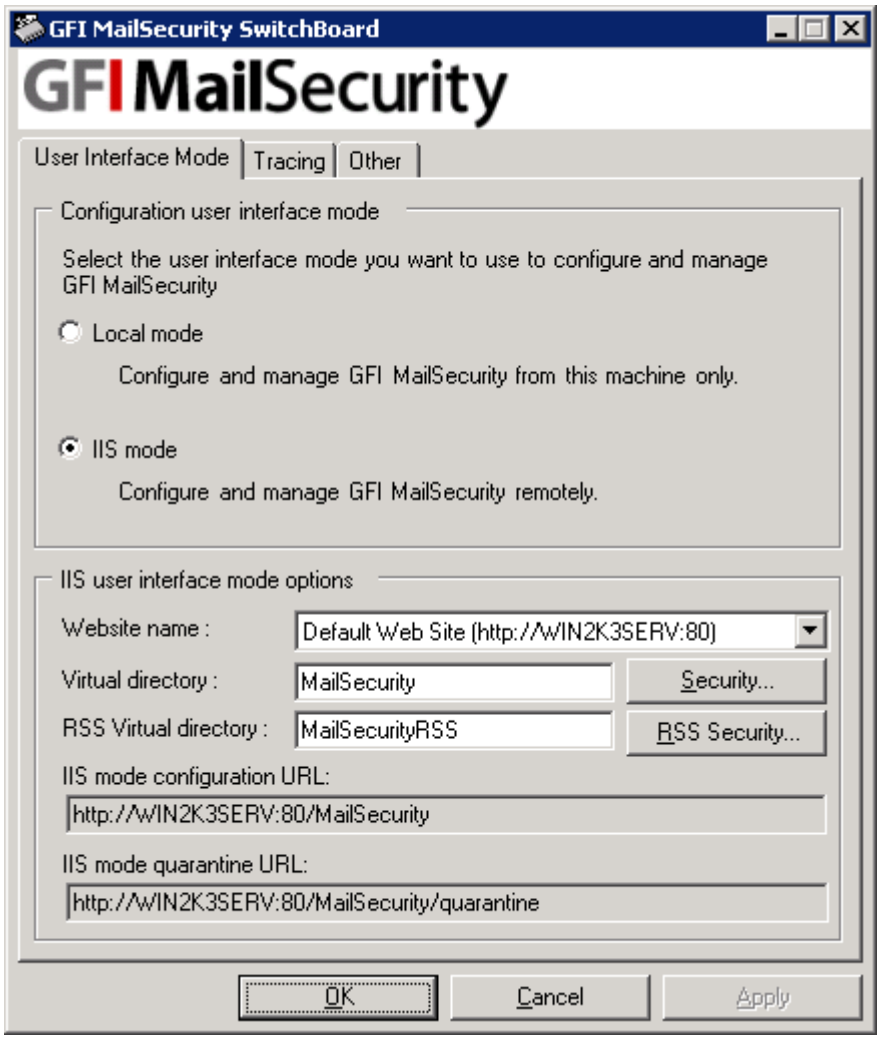
2. In the RSS Feeds area, right-click on RSS icon next to the search folder to subscribe to and click **Copy Shortcut** to copy the RSS feed URL.

3. Use the copied URL in your RSS Feed Reader application to create a new RSS feed subscription.

7.4.3 Securing access to the GFI MailSecurity Quarantine RSS feeds

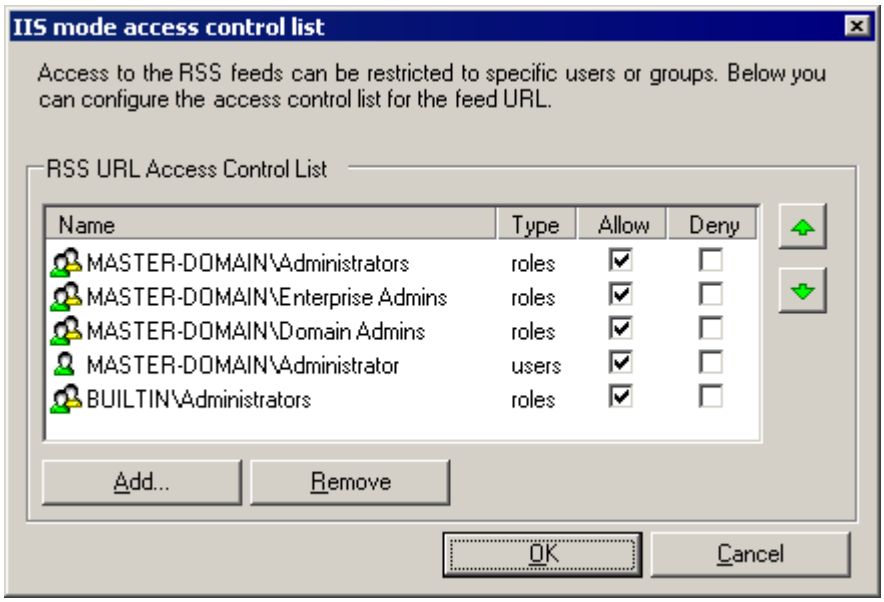
You can configure GFI MailSecurity to create quarantine RSS feeds on specific quarantine folders. To configure who can subscribe to the quarantine RSS feeds:

1. Navigate to **Start ► Programs ► GFI MailSecurity ► GFI MailSecurity SwitchBoard**.



Screenshot 72 - GFI MailSecurity SwitchBoard

2. In the **GFI MailSecurity SwitchBoard** dialog box, click **RSS Security…**.



Screenshot 73 - Quarantine RSS feeds Access Control Lists

3. In the **IIS mode access control list** dialog box you can configure who can subscribe to the quarantine RSS feeds. Click **Add** or **Remove** buttons to add or remove users or groups from the list. For each entry, select **Allow** or **Deny** checkboxes to allow or deny access.

4. Click **OK** to finalize access permissions.

5. Click **OK** and wait while applying the new settings.

6. When the process completes, click **OK**.

7.5 Directory Harvesting

Directory harvesting attacks occur when malicious mail senders send emails to randomly generated email addresses. While some of these email addresses match real users, the majority of addresses are invalid.

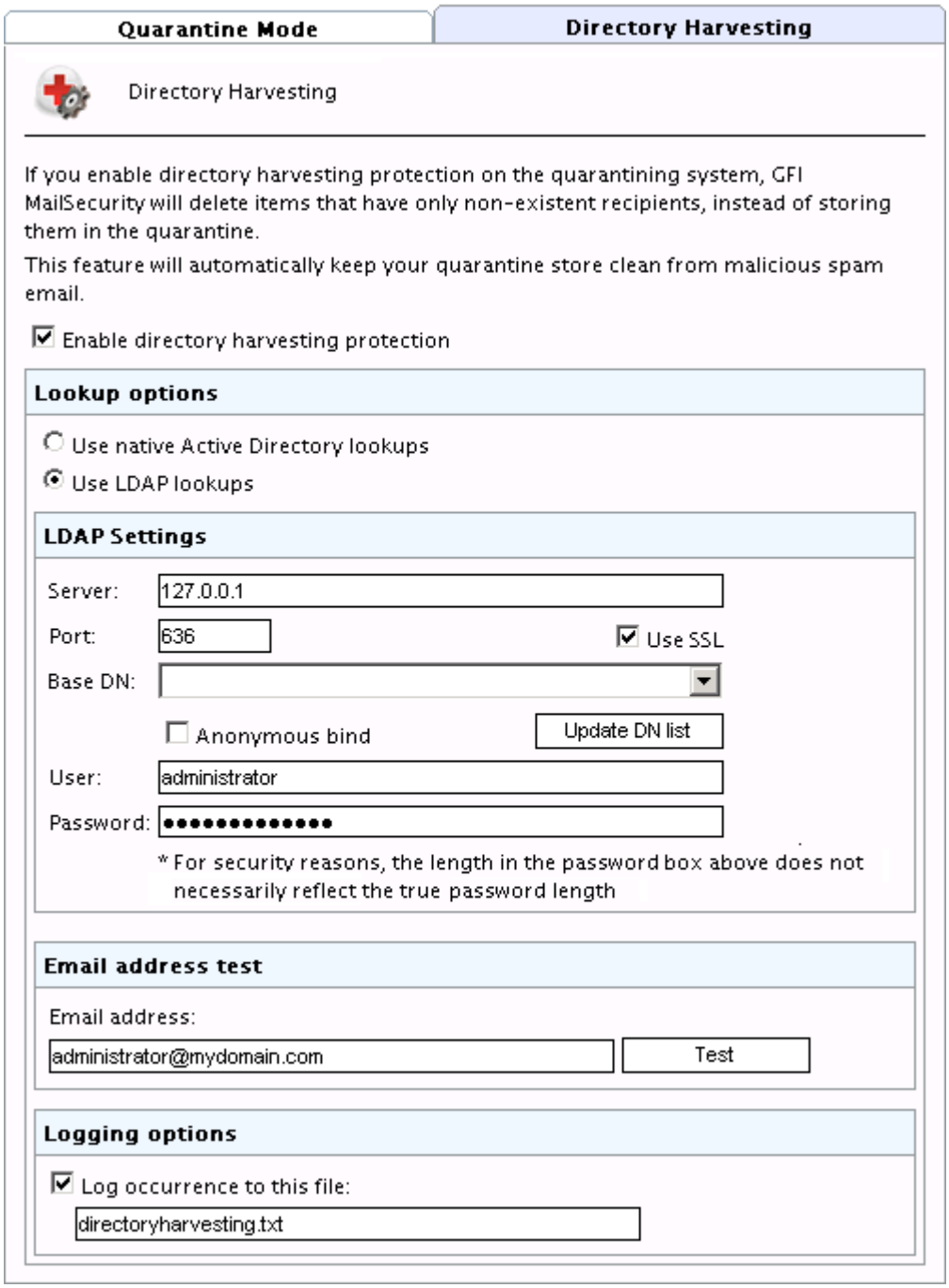
The GFI MailSecurity Directory Harvesting feature scans emails for non-existing local email addresses before these are stored to the Quarantine Store. If an email is triggered as a Directory harvesting attack, it is permanently deleted. This reduces the number of emails for administrative reviewing.

7.5.1 Configuring Directory Harvesting

The Directory Harvesting filter requires access to the list of local addresses. This is done either via Active Directory or if communication with Active Directory is not possible, via an LDAP server.

1. Navigate to **GFI MailSecurity ► Quarantine ► Quarantine Options**.

2. Click the **Directory Harvesting** tab.


Quarantine Mode
Directory Harvesting
Directory Harvesting
If you enable directory harvesting protection on the quarantining system, GFI MailSecurity will delete items that have only non-existent recipients, instead of storing them in the quarantine.
This feature will automatically keep your quarantine store clean from malicious spam email.
Enable directory harvesting protection
Lookup options
Use native Active Directory lookups
Use LDAP lookups
LDAP Settings
Server: 127.0.0.1
Port: 636
Use SSL
Base DN:
Anonymous bind
Update DN list
User: administrator
Password:
* For security reasons, the length in the password box above does not necessarily reflect the true password length
Email address test
Email address:
administrator@mydomain.com
Test
Logging options
Log occurrence to this file:
directoryharvesting.txt

Screenshot 74 - Directory Harvesting filter

3. Select **Enable directory harvesting protection** checkbox.

4. Select the user lookups method to use:

Use native Active Directory lookups	Select this option if GFI MailSecurity is installed in Active Directory mode and has access to ALL users on Active Directory. Skip to step 9. **NOTE 1:** When GFI MailSecurity is installed in Active Directory user mode on a DMZ, the AD of a DMZ usually does not include all the network users (email recipients). In this case configure directory harvesting to use LDAP lookups.

	NOTE 2: When GFI MailSecurity is behind a firewall, the Directory Harvesting feature might not be able to connect directly to the internal Active Directory because of Firewall settings. Use LDAP lookups to connect to the internal Active Directory of your network and ensure to enable default port 389 on your Firewall.
Use LDAP lookups	Select this option when GFI MailSecurity is installed in SMTP mode and/or when GFI MailSecurity does not have direct access to the full list of users.

5. Specify the LDAP server name or IP address in the **Server** text box.

NOTE: In an Active Directory environment, the LDAP server is typically the Domain Controller.

6. Specify the port number, default 389, in the **Port** text box. If connection to the LDAP server is via SSL, select **Use SSL** and the default port changes to 636.

NOTE: Ensure that the port is enabled from the Firewall.

7. Click **Update DN list** to populate the **Base DN** list and select the Base DN (that is, the top level in the Active Directory hierarchy).

8. If your LDAP server requires authentication specify the **User** and **Password**. Alternatively, if no authentication is required, select **Anonymous bind**.

9. Test your configuration settings by specifying a valid email address in the **Email address** box and click **Test**. If the email address is not found review the configuration settings.

10. To log Directory Harvesting activity to a log file, select **Log occurrence to this file** and specify:

- Path and file name (including .txt extension) to a custom location on disk where to store the log file, or
- The file name only (including .txt extension). The log file is stored in the following default location:

  <*GFI MailSecurity installation path*>\ContentSecurity\MailSecurity\Logs\<*filename*>*.txt*

11. Click **Apply**.

8 Reporting

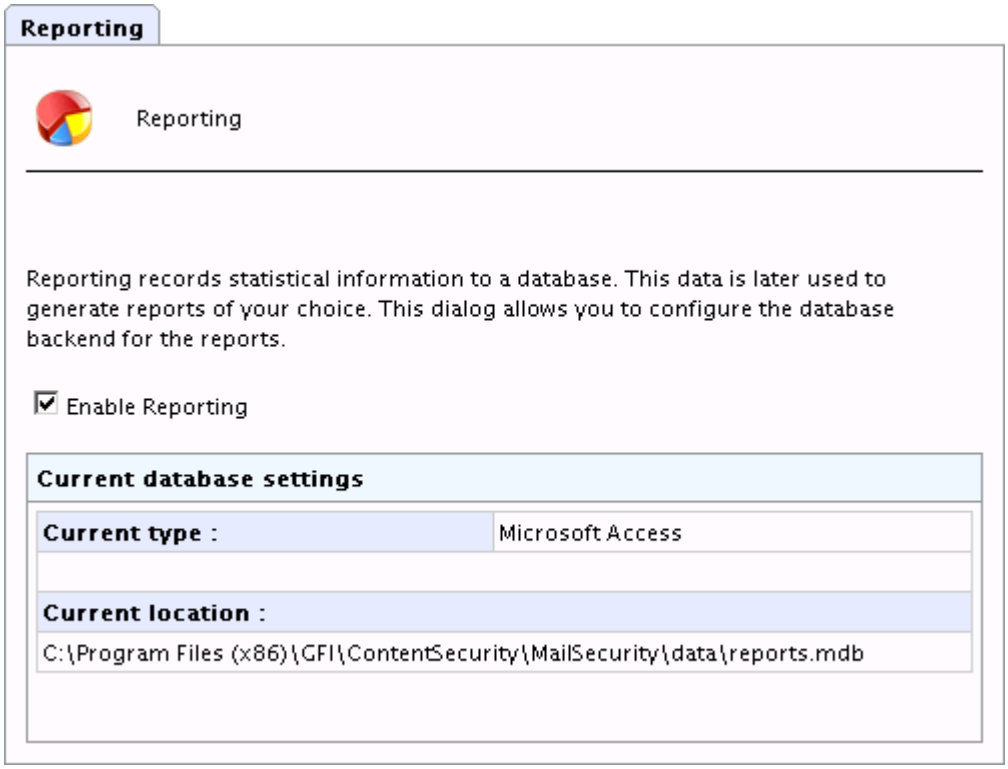
8.1 Introduction

Use the GFI MailSecurity Reporting option to configure logging of statistical data, such as the amount of emails being processed and quarantined, into a database. You can then install the GFI MailSecurity ReportPack add-on, to generate reports based on the data collected in the database. For more information about the GFI MailSecurity ReportPack navigate to **GFI MailSecurity ► Reporting ► GFI MailSecurity ReportPack**.

NOTE: Reporting is enabled by default.

8.2 Enabling reporting

1. Navigate to **GFI MailSecurity ► Reporting**.


Reporting
Reporting
Reporting records statistical information to a database. This data is later used to generate reports of your choice. This dialog allows you to configure the database backend for the reports.
Enable Reporting
Current database settings
Current type :
Microsoft Access
Current location :
C:\Program Files (x86)\GFI\ContentSecurity\MailSecurity\data\reports.mdb

Screenshot 75 - Reporting page

2. Select **Enable Reporting** check box.

In the **Current database settings** area, the type and location of the database are displayed.

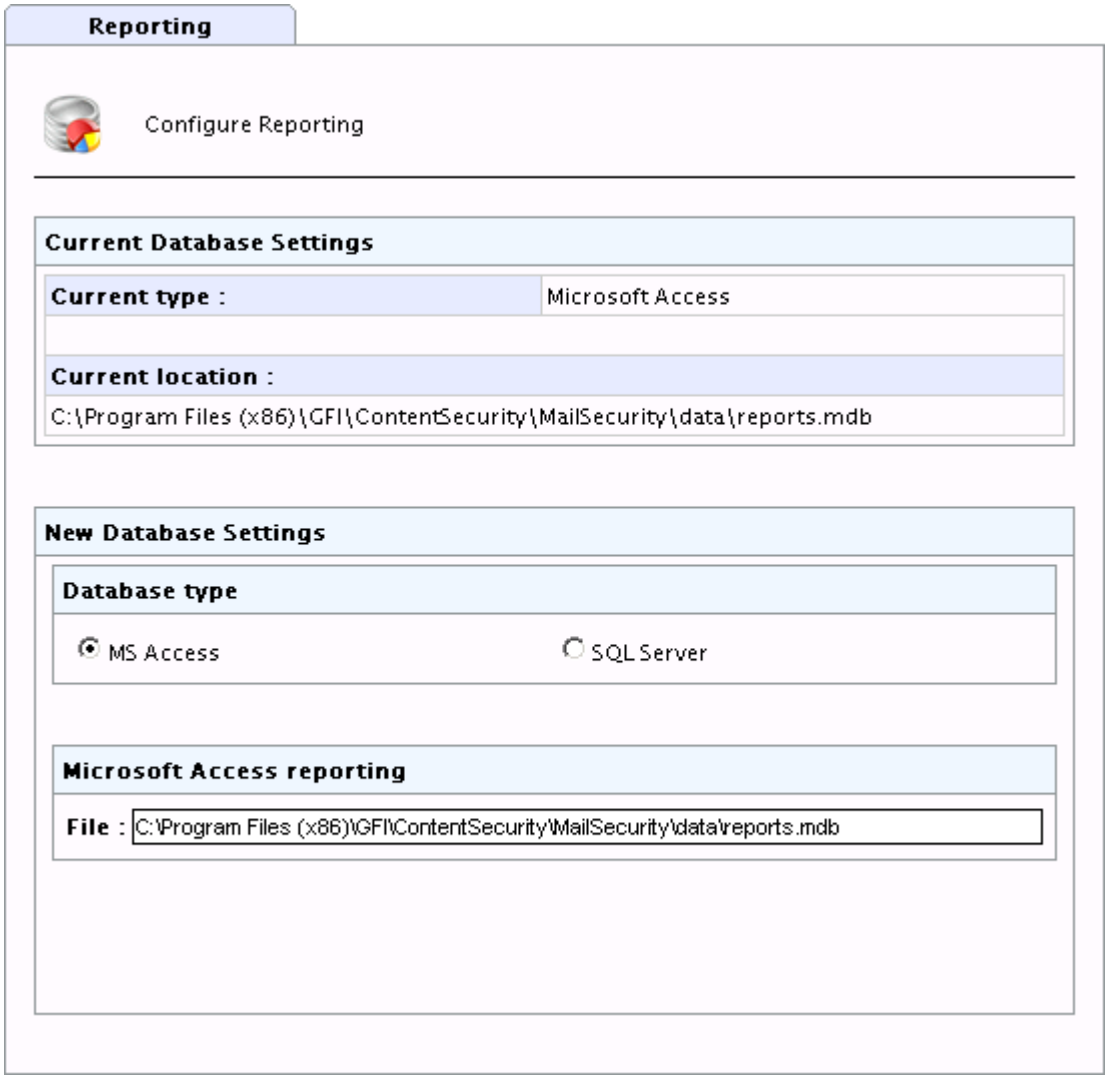
8.3 Configuring the database

By default, GFI MailSecurity uses a Microsoft Access database reports.mdb located in:

<GFI MailSecurity installation path>\ContentSecurity\MailSecurity\data\

You can also use a Microsoft SQL Server database for reports.

Configuring a Microsoft Access database backend



Screenshot 76 - Configuring a Microsoft Access database backend

1. Navigate to **GFI MailSecurity ► Reporting ► Configure Database**.

2. Select **MS Access**.

3. Key in the complete path including filename (and .mdb extension) of the database file. If you only specify a filename, the database file is created in the following default path:

<GFI MailSecurity installation path>\ContentSecurity\MailSecurity\data\

4. Click **Apply**.

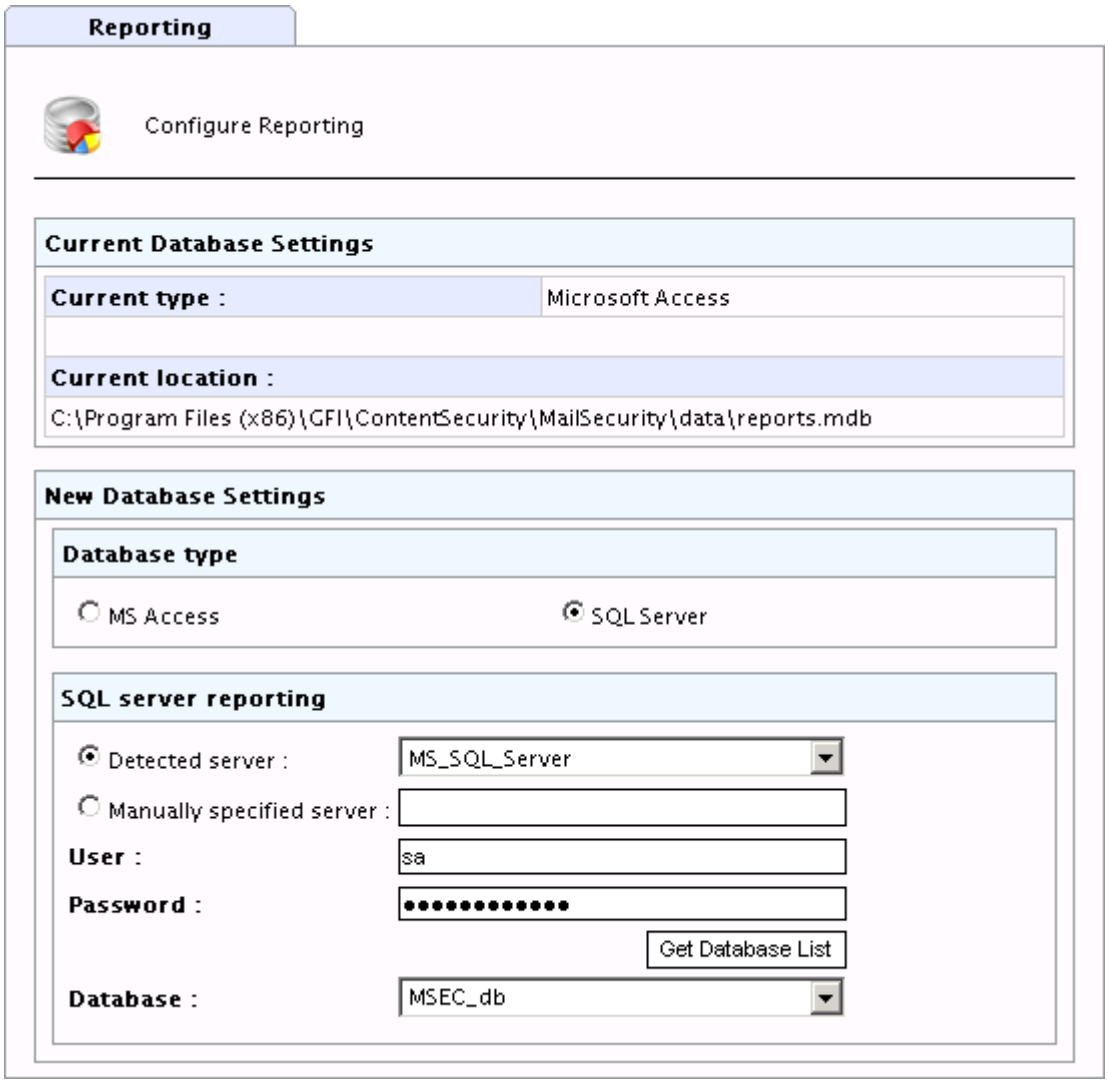
8.3.1 Configuring a Microsoft SQL Server database backend

1. Create a new database in Microsoft SQL Server.

NOTE 1: It is recommended to create a dedicated user/login in Microsoft SQL Server for GFI MailSecurity and assign it the database owner role.

NOTE 2: For information how to create a new database in Microsoft SQL Server refer to http://kbase.gfi.com/showarticle.asp?id=KBID003379.

2. Navigate to **GFI MailSecurity ► Reporting ► Configure Database**.



Screenshot 77 - Configuring SQL Server Database backend

3. Select **SQL Server**.

4. Select **Detected server** and select the automatically detected SQL Server from the list. If the server is not detected, select **Manually specified server** and key in the IP address or server name of the Microsoft SQL Server.

5. Key in the credentials with permissions to read/write to the database.

6. Click **Get Database List** to extract the list of databases from the server.

7. From the **Database** list, select the database created for GFI MailSecurity Reporting.

8. Click **Apply**.

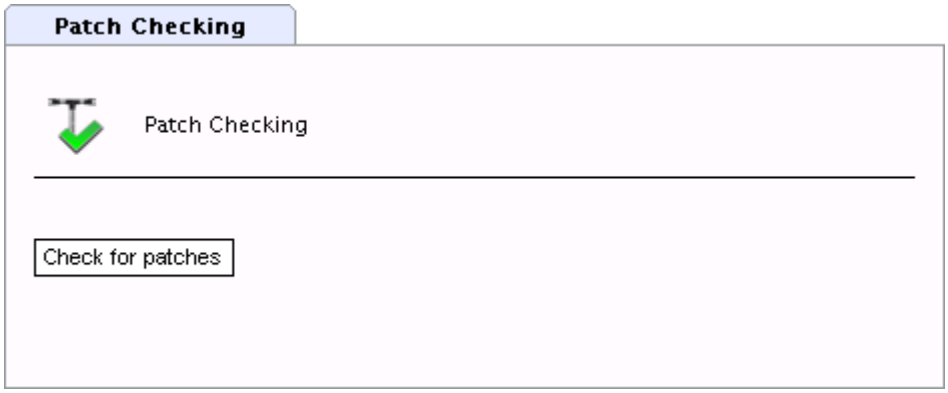
9 Miscellaneous

9.1 Patch Checking

The Patch Checking feature verifies if there are any software patches available for your version of GFI MailSecurity by directly connecting to the GFI Update Servers.

NOTE: It is highly recommended to check for patches periodically to keep GFI MailSecurity running efficiently.

1. Navigate to **GFI MailSecurity ► General ► Patch Checking**.



Screenshot 78 - List of available patches

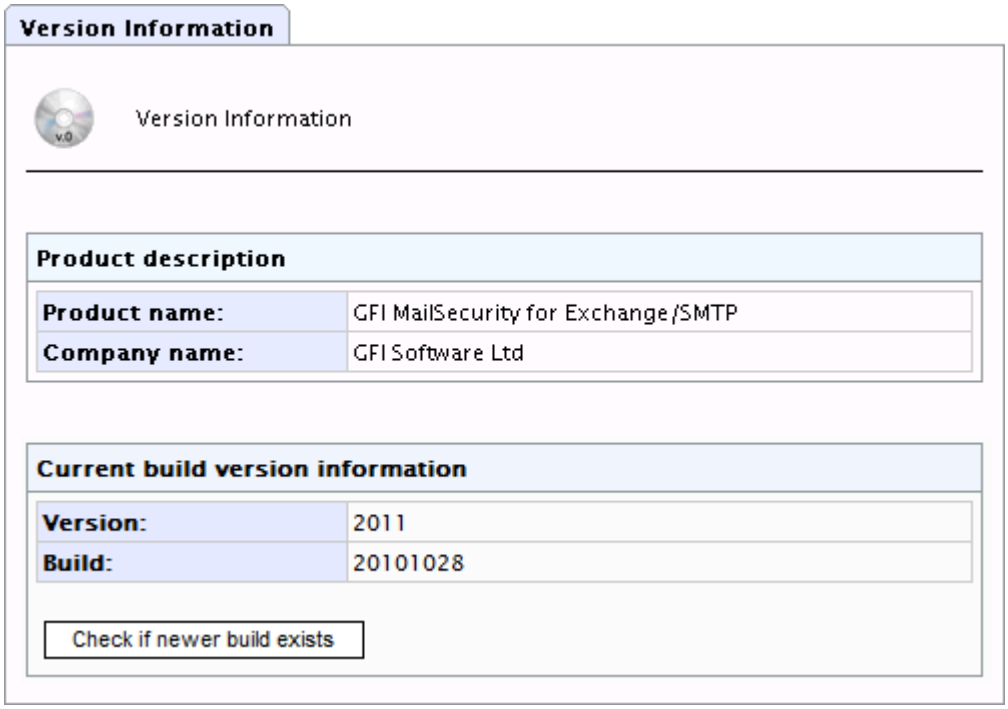
2. Click **Check for patches** to connect to the GFI Update Server and check for available updates.

3. Click the **Download** link of patches to download.

4. On completion, install the downloaded updates.

NOTE: Since the software patches vary in file format (for example, .dll, .exe etc...), read the relative patch information for installation instructions. To access the installation instructions and other information applicable to a patch, click the **Information** link provided in the list of available updates. An incorrect patch installation might cause the product to malfunction or degrade its performance.

9.2 Version Information



Screenshot 79 - Version Information page

To view the GFI MailSecurity version information, navigate to **GFI MailSecurity ► General ► Version Information**. The version information page displays the GFI MailSecurity installation version number and the build information.

To check whether you have the latest build of GFI MailSecurity installed on your machine, click **Check if newer build exists**.

NOTE: Always quote your GFI product Version and Build information when contacting GFI support.

9.3 Tracing

GFI MailSecurity provides the facility of creating log files for debugging purposes. When enabled, GFI MailSecurity stores a number of log files in the following folders:

- <*GFI MailSecurity installation path*>\GFI\ContentSecurity\DebugLogs\
- <*GFI MailSecurity installation path*>\GFI\ContentSecurity\MailSecurity\DebugLogs\
- <*GFI MailSecurity installation path*>\GFI\ContentSecurity\WwwConf\DebugLogs\

NOTE: Use tracing for troubleshooting purposes or when contacting GFI Support. It is recommended that tracing is disabled if there are performance issues with the GFI MailSecurity machine.

To enable or disable Tracing:

1. Navigate to **Start ► GFI MailSecurity ► GFI MailSecurity Switchboard** and select **Tracing** tab.

GFI MailSecurity SwitchBoard
GFI MailSecurity
User Interface Mode
Tracing
Other
Tracing options
Configure the GFI MailSecurity tracing options. Tracing is a means of creating log files which are helpful for debugging purposes. Log files will be created in the DebugLogs folders under the ContentSecurity, MailSecurity and WwwConf folders. You can enable and disable any or all of the tracing options available below.
Tracing
Enabled
Disabled
GFI ContentSecurity Attendant
GFI MailSecurity Scan Engine
GFI MailSecurity Attendant
GFI MailSecurity Configuration
GFI MailSecurity SwitchBoard
OK
Cancel
Apply

Screenshot 80 - Tracing settings

2. Select **Enabled** next to the feature to enable logging for, or **Disable** to disable logging.

GFI ContentSecurity Attendant	Log files related to the viewer application when GFI MailSecurity is loaded in local mode.
GFI MailSecurity Scan Engine	Log files for the scanning engines and filters.
GFI MailSecurity Attendant	Log files for all the components (except scanning functions) of GFI MailSecurity such as the Quarantine Store.
GFI MailSecurity Configuration	Log files for the GFI MailSecurity web interface.
GFI MailSecurity Switchboard	Log files related to the operation and usage of the Switchboard.

3. Click **Apply** to apply changes and click **OK** when all settings are applied successfully.

9.4 Failed emails

There may be instances where GFI MailSecurity is not able to scan an email, for example, spam emails containing corrupted header information. In this case, GFI MailSecurity blocks the email since it may contain malicious content, and moves it to the following folder:

<GFI MailSecurity installation path>\Content Security\MailSecurity\failedmails

9.4.1 Reprocessing legitimate emails that fail

If a large number of legitimate emails are being moved to the failedmails folder, it is recommended to contact GFI Support to resolve the issue. When the issue is resolved, emails can be re-scanned by GFI MailSecurity as explained in the following sections, to determine if they are safe to be delivered.

NOTE: Files with extension .PROP in the failedmails folder are used for troubleshooting purposes. When reprocessing failed emails, these files can be deleted.

GFI MailSecurity installed on Microsoft Exchange Server 2007/2010

1. Change the extension of .TXT files in the failedmails folder to .EML.

2. Move renamed files to the following folder:

<*drive*>\Program Files\Microsoft\Exchange Server\TransportRoles\Replay

NOTE: To automatically change the extension of all .TXT files in the failedmails folder to .EML files, from command prompt change the directory to the failedmails folder and run the following command: `ren *.txt *.eml`

GFI MailSecurity installed on Microsoft Exchange Server 2003

1. Move emails (in .txt format) to the following folder:

<*Microsoft Exchange installation path*>\Exchsrvr\Mailroot\vsi 1\PickUp

GFI MailSecurity installed on Gateway server

1. Move emails (in .txt format) to the following folder:

<*drive*>\Inetpub\mailroot\Pickup

9.4.2 Failed emails notifications

GFI MailSecurity can be configured to notify the administrator whenever an email fails processing.

NOTE: To configure the administrator's email address refer to chapter Configuring the administrator's email address.

1. Navigate to **Start ► Programs ► GFI MailSecurity ► GFI MailSecurity Switchboard**.

Screenshot 81 - Failed emails notification

2. Select **Other** tab.

3. Select **Send Notifications on Failed Mail**.

4. Click **Apply**.

9.5 Notification templates

Notifications

GFI MailSecurity sends notification emails to the administrator/user whenever an event that needs attention occurs.

There are two types of notifications:

Administrative notifications	GFI MailSecurity sends these notifications, for example, when a license is going to expire, when a new patch is available and when new anti-virus engine updates are available.
End user notifications	GFI MailSecurity sends these notifications to the sender/recipient of an email

when an email gets quarantined or modified.

Templates

There are two types of templates:

Tag-based templates	Use tags (in the form "[TAGNAME]") to indicate fields which need to be replaced with dynamic data.
XSL-based templates	An XSL style sheet, used in conjunction with dynamically created XML data to generate the notification message.

Notification email messages are generated from templates stored in:

<GFI MailSecurity installation path>\ContentSecurity\MailSecurity\Templates.

The templates contain the text of notification messages, as well as field names that are replaced by dynamic values upon generation of the notification message.

9.5.1 Customizing notification templates

NOTE 1: Always take a backup of templates before modification.

NOTE 2: Before modifying XSL-based templates, make sure you are proficient in XML and XSL. Incorrect code can cause GFI MailSecurity to not send notification emails.

NOTE 3: Template folder names and template file names are predefined and should not be changed.

To customize a notification template:

1. Navigate to: *<GFI MailSecurity installation path>*\ContentSecurity\MailSecurity\Templates.

2. Open the folder containing the template to modify. Each folder can contain any of the following files:

html.txt	An HTML-type body template
text.txt	A plain text body template
subject.txt	Subject template

3. Take a backup of the template(s) to modify.

4. Open the template to modify in a text editor (for example, Notepad) and customize accordingly.

5. Save changes.

NOTE: To check whether an XSL based template is well formed, save a copy of the template in .xml extension and load it in Microsoft Internet Explorer. If the template is well formed, the browser loads the code correctly. If it contains errors, the browser specifies the location/code where issues are located.

Variables used in XSL-based notification templates

Notify user and notify manager notifications (in notifyuser folder and notifymanager folder respectively).

VARIABLE	DESCRIPTION
“itemsenderemailaddress”	The sender’s email address.
“itemsubject”	The quarantined email subject.
“itemdeliverytime”	The date and time the message was delivered.
“itemrecipients/recipient”	The message recipients. Use xsl:for-each to enumerate.
“action”	Action taken on message by GFI MailSecurity.
“shortdate”	Date when email was processed. Short date format.
“longdate”	Date when email was processed. Long date format.
“time24”	Time when email was processed. 24 hour format.
“time12”	Time when email was processed.
“infringedrules/rule”	List of rules infringed. Use xsl:for-each to enumerate.
“itemmessageid”	The message ID of the email processed.
“itemscandirection”	0 - Inbound : 1 - Outbound : 4 - Mixed
“Itemsendername”	The sender’s name.
“Itemscanresult”	The scan result.

9.6 Monitoring Virus Scanning API

When GFI MailSecurity is installed on the Microsoft Exchange machine, you can monitor Virus Scanning API performance using the Performance Monitor MMC.

9.6.1 Performance counter in Windows 2003 Server

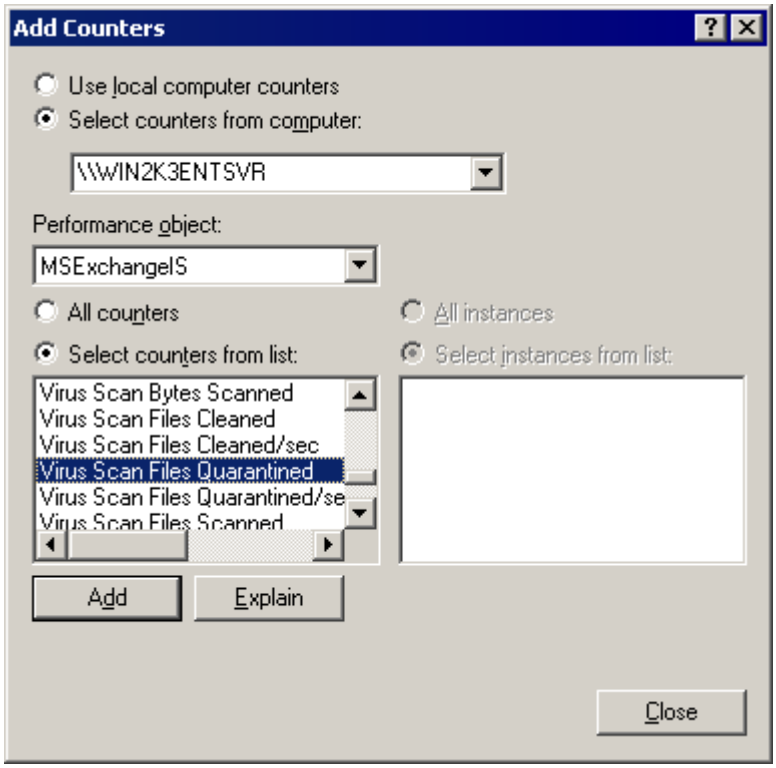
To add and view, the performance monitor counter in Windows 2003 Server, follow these steps:

1. Click on **Start ► Control Panel**.

2. In the **Control Panel** window, double-click **Administrative Tools**.

3. In the **Administrative Tools** window, double-click **Performance**, to start the Performance monitor MMC.

4. From the System Monitor viewing pane, click **Add** to load the **Add Counters** dialog.



Screenshot 82 - Adding VSAPI performance monitor counters

5. From the **Performance object** dropdown list, select **MSExchangeIS**.

6. Click **Select counters from list**.

7. Select any **Virus Scan** counter you need to add, as listed in the Performance monitor counters section below.

8. Click **Add**.

9. Repeat step 7 and 8 to add all the performance counters needed.

10. Click **Close**.

The counters of added processes are now displayed in the Performance Monitor.

9.6.2 Performance counter in Windows 2008 Server

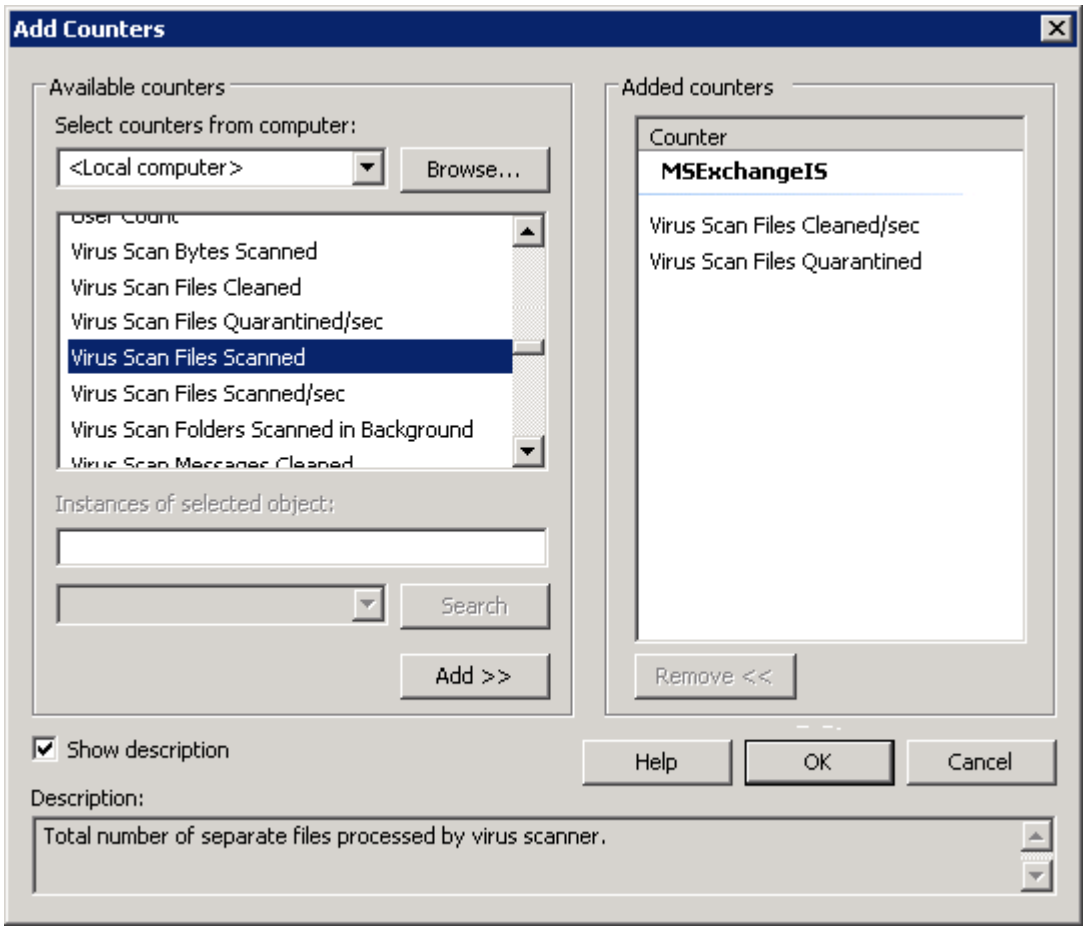
NOTE: In a Microsoft Exchange Server 2007/2010 environment, the VSAPI performance monitor counters are only available on machines with the Mailbox Server Role installed.

To add and view, the performance monitor counter in Windows 2008 Server, follow these steps:

1. Navigate to **Start ► Control Panel ► Administrative Tools ► Reliability and Performance Monitor**.

2. In the monitor dialog, expand **Monitoring Tools** and select **Performance Monitor**.

3. From the viewing pane, click **Add** to load the **Add Counters** dialog.



Screenshot 83 - Adding VSAPI performance monitor counters in Windows 2008 Server

4. From the **Select counters from computer** dropdown list, select the computer to monitor.

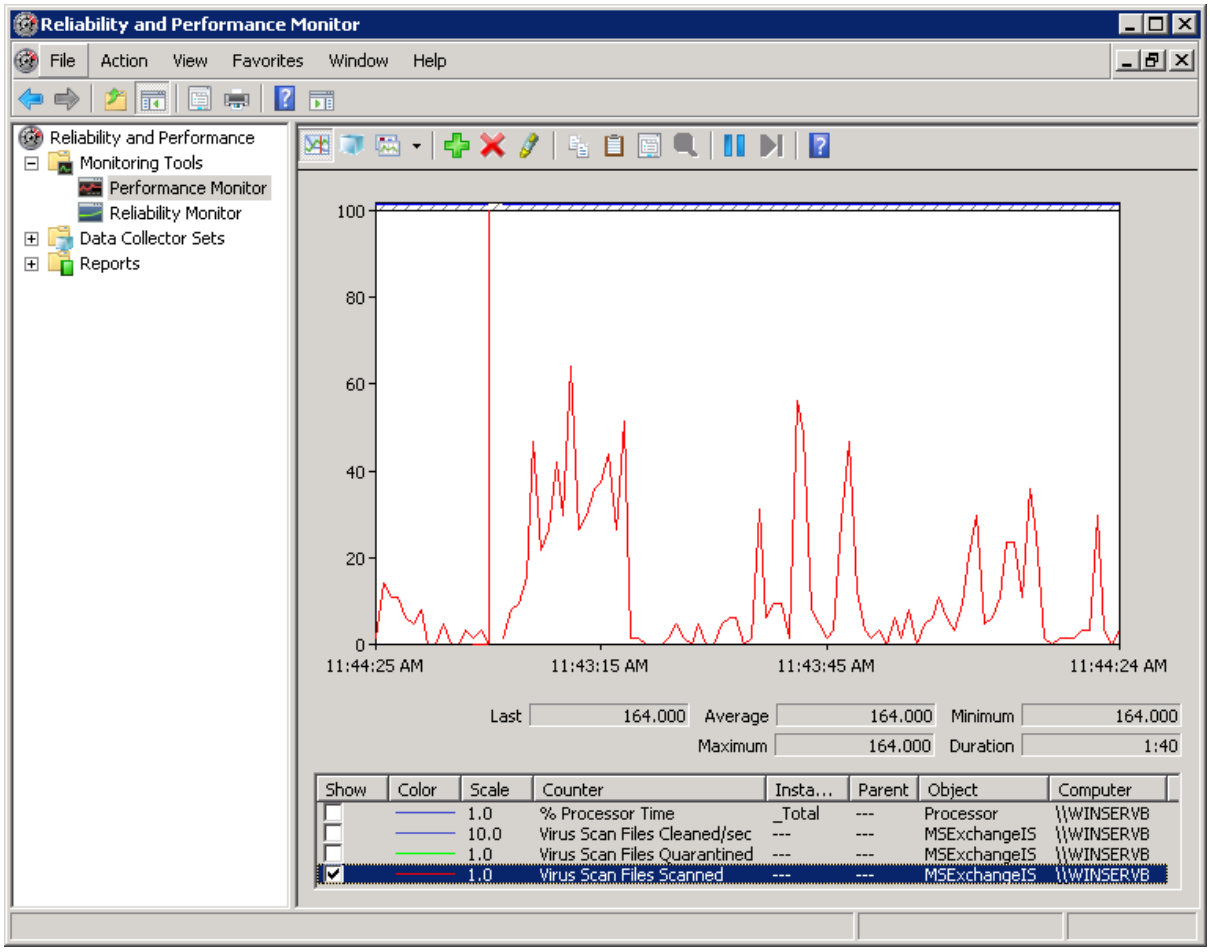
5. From the list of available counters, expand **MSExchangeIS.**

6. Select any **Virus Scan** counter you need to add, as listed in the Performance monitor counters section below and click **Add**.

7. Repeat step 8 for each process to monitor.

8. Click **Ok** to apply changes.

The counters of added processes are now displayed in the Performance Monitor.



Screenshot 84 - Monitoring Virus Scan Files Scanned in Windows Server 2008 Performance Monitor

9.6.3 Performance monitor counters

The following VSAPI Performance Monitor counters are available:

Virus Scan Messages Processed	This is a cumulative value of the total number of top-level messages that are processed by the virus scanner.
Virus Scan Messages Processed/sec	This counter represents the rate at which top-level messages are processed by the virus scanner.
Virus Scan Messages Cleaned	The total number of top-level messages that are cleaned by the virus scanner.
Virus Scan Messages Cleaned/sec	The rate at which top-level messages are cleaned by the virus scanner.
Virus Scan Messages Quarantined	The total number of top-level messages that are put into quarantine by the virus scanner.
Virus Scan Messages Quarantined/sec	The rate at which top-level messages are put into quarantine by the virus scanner.

Virus Scan Files Scanned	The total number of separate files that are processed by the virus scanner.
Virus Scan Files Scanned/sec	The rate at which separate files are processed by the virus scanner.
Virus Scan Files Cleaned	The total number of separate files that are cleaned by the virus scanner.
Virus Scan Files Cleaned/sec	The rate at which separate files are cleaned by the virus scanner.
Virus Scan Files Quarantined	The total number of separate files that are put into quarantine by the virus scanner.
Virus Scan Files Quarantined/sec	The rate at which separate files are put into quarantine by the virus scanner.
Virus Scan Bytes Scanned	The total number of bytes in all of the files that are processed by the virus scanner.
Virus Scan Queue Length	The current number of outstanding requests that are queued for virus scanning.
Virus Scan Folders Scanned in Background	The total number of folders that are processed by background scanning.
Virus Scan Messages Scanned in Background	The total number of messages that are processed by background scanning.

10 Troubleshooting

10.1 Introduction

The troubleshooting chapter explains how you should go about resolving any issues that you might encounter. The main sources of information available to users are:

- The manual - most issues can be solved by reading this manual.
- GFI Knowledge Base articles
- Web forum
- Contacting GFI Technical Support

10.2 Knowledge Base

GFI maintains a Knowledge Base, which includes answers to the most common problems. If you have a problem, consult the Knowledge Base first. The Knowledge Base always has the most up-to-date listing of technical support questions and patches. To access the Knowledge Base, visit http://kbase.gfi.com/.

10.3 Web Forum

User to user technical support is available via the web forum. The forum can be found at: http://forums.gfi.com/.

10.4 Common issues

ISSUE ENCOUNTERED	POSSIBLE CAUSE AND SOLUTION
Error when receiving emails: "Body type not supported by Remote Host"	This error occurs when emails are relayed from the IIS SMTP server to the Microsoft Exchange server. This happens because Microsoft Exchange Server versions 4.0, 5.0, and 5.5 are not able to handle 8-bit MIME messages. For instructions how to turn off 8BITMIME in Windows Server 2003 refer to: http://support.microsoft.com/default.aspx?scid=kb;en-us;Q262168.
Legitimate emails are moved to the **failedmails** folder	**Cause** When GFI MailSecurity is not able to scan incoming emails, these emails are not delivered to the recipient(s) since they may contain malicious content. GFI MailSecurity moves these emails to the following folder: <GFI MailSecurity installation path>\Content Security\MailSecurity\failedmails **Solution** If any legitimate emails are moved to the failedmails folder, these can be manually re-processed for delivery. For more information how to do this in various environments refer to: http://kbase.gfi.com/showarticle.asp?id=KBID003263
GFI MailSecurity returns the following error: “The file was blocked by the attachment filtering module at file type checking stage. The attachment claimed to be a <filetype 1> which is identified as being	**Cause** An attached file is detected as being a file with multiple file-types. **Solution** For information how to resolve this issue refer to:

an attachment in category <filetype 1>. The file was detected to belong to the category <filetype 2>."	http://kbase.gfi.com/showarticle.asp?id=KBID001922. **NOTE:** The solution to this issue requires changes in the Windows Registry. It is important to follow the steps described in the solution with attention as incorrect configuration can cause serious, system-wide problems.

10.5 Request technical support

If you have referred to this manual and our Knowledge Base articles, and you still cannot solve issues with the software, contact the GFI Technical Support team by filling in an online support request form or by phone.

- **Online:** Fill out the support request form on: http://support.gfi.com/supportrequestform.asp. Follow the instructions on this page closely to submit your support request.
- **Phone:** To obtain the correct technical support phone number for your region visit: http://www.gfi.com/company/contact.htm.

NOTE: Before you contact our Technical Support team, have your Customer ID available. Your Customer ID is the online account number that is assigned to you when you first register your license keys in our Customer Area from: http://customers.gfi.com.

We will answer your query within 24 hours or less, depending on your time zone.

10.6 Build notifications

We strongly suggest that you subscribe to our build notifications list. This way, you will be immediately notified about new product builds. To subscribe to our build notifications, visit: http://www.gfi.com/pages/productmailing.htm.

11 Glossary

Active Directory	A technology that provides a variety of network services, including LDAP directory services.
AD	*See* Active Directory
Anti-virus software	Software that detects malware such as Trojan horses in emails, files and applications.
Botnet	A network of infected computers that run autonomously and are controlled by a hacker/cracker.
Decompression engine	A scanning module that decompresses and analyzes archives attached to an email.
Demilitarized Zone	An internet-facing section of a network that is not part of the internal network. Its purpose typically is to act as a gateway between internal networks and the internet.
Directory harvesting	Email attacks where known email addresses are used as a template to create other email addresses.
Domain Name System	A database used by TCP/IP networks that enables the translation of hostnames to IP addresses and provides other domain related information.
DMZ	*See* Demilitarized Zone
DNS	*See* Domain Name System
DNS MX	*See* Mail Exchange
Email headers	Information that precedes the email text (body) within an email message. This includes the sender, recipient, subject, sending and receiving time stamps, etc.
Exploit	An attack method that uses known vulnerabilities in applications or operating systems to compromise the security of a system.
Gateway	The computer (server) in a LAN that is directly connected to an external network. In GFI MailSecurity, gateway refers to the email servers within the company that first receive email from external domains.
HTML Sanitizer	A filtering module within GFI MailSecurity that scans and removes html scripting code from emails.
HTTP	Hypertext Transfer Protocol - A protocol used to transfer hypertext data between servers and internet browsers.
IIS	*See* Internet Information Services
Internet Information Services	A set of Internet-based services created by Microsoft Corporation for internet servers.
LDAP	*See* Lightweight Directory Access Protocol
Lightweight Directory Access Protocol	An application protocol used to query and modify directory services running over TCP/IP.

Mail Exchange	The DNS record used to identify the IP addresses of the domain's mail servers.
Malware	All malicious types of software that are designed to compromise computer security and which usually spread through malicious methods.
Microsoft Message Queuing Services	A message queue implementation for Windows Server operating systems.
MIME	*See* Multipurpose Internet Mail Extensions
MSMQ	*See* Microsoft Message Queuing Services
Multipurpose Internet Mail Extensions	A standard that extends the format of e-mail to support text other than ASCII, non-text attachments, message bodies with multiple parts and header information in non-ASCII character sets.
PGP encryption	A public-key cryptosystem often used to encrypt emails.
Public folder	A common folder within Microsoft Exchange that allows users to share information.
Quarantine Store	A central repository within GFI MailSecurity where all blocked emails are retained until they are reviewed by an administrator.
Recursive archives	Archives that contain multiple levels of sub-archives (that is, archives within archives). Also known as nested archives.
RSS feeds	A protocol used by websites to distribute content (feeds) that frequently changes (for example news items) with its subscribers.
Secure Sockets Layer	A protocol to ensure an integral and secure communication between networks.
Simple Mail Transport Protocol	An internet standard used for email transmission across IP networks.
SMTP	*See* Simple Mail Transport Protocol
SSL	*See* Secure Sockets Layer
Trojan horse	Malicious software that compromises a computer by disguising itself as legitimate software.
Virus scanning engine	A virus detection technology implemented within antivirus software that is responsible for the actual detection of viruses.
Zombie	An infected computer that is made part of a Botnet through malware.

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